The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 343.—Vol. XII.] LONDON: SATURDAY, MARCH 19, 1842. [Price 6d.

SHARES IN THE CELEBRATED CARNBREA TIN AND COPPER MINES, Cornwall.—TO BE SOLD, BY AUCTION, by Mr. W. W. SIMPSON, at the Mart, London, on Tuesday, the 29th instant, at Twelve o'clock, ONE HUNDRED SHARES in the above well-known mines, which are paying a dividend of about £20 per share, with prospects of further increase. They will be sold in lots of five or more shares, to suit the convenience of purchasers.—Persons desirous of inspecting the mines may do so on application to the agents at the mines. Particulars may be obtained at the Mart; and of Mr. W. W. Simpson, 149 Bucklersbury. 1

VALUABLE MINE MATERIALS.—TO BE SOLD, BY PUBLIC AUCTION, on Tuesday, the 12th of April next, and following day, at WHEAL DUFFIELD MINES, in the parish of Gwinear, in the county of Cornwall, a STEAM-ENGINE, of 80-inch cylinder, with boiler, warming-tube, steam-pipes, &c., complete; Cathead and Balance Bob; one large Capstan, and three smaller ditto, with shears; an excellent Steam Whim, of 20-inch cylinder, with boiler, &c.; one 15-inch Capstan Rope, ninety fathoms long; 14 and 15-inch Memel and Oak Rods, with strapping plates and bolts to fit; Pumps of the following dimensions:—27 9-feet 18 inch; 32 9-feet 16 inch; 4 9-feet 17 inch; 2 6-feet 16 inch; 29-feet 15 inch; 2 8-feet 15 inch; 2 9 feet 13 inch; 2 9 feet 12 inch; 2 9-feet 6 inch; 4 6-feet 10 inch. Windbores—Six of 6 feet, 11, 15, 16, 17, and 18 inch, and four of 9 feet 6, 13, 15, and 17 inch. Go-er-pieces—Four of 6 feet, 12, 13, and 17 inch. Top Box-pieces—Seven of 10, 12, 14, and 15 inch. Matching-pieces—Six of 11, 16, 17, 18, and 20 inch. Plunger Cases—Four of 9 feet, 15, 16, and 19 inch, with stuffing boxes and glands. Poles of 10 feet 14, 11 feet 14, and 12 feet 18 inch. Working Barrels—one of 9 feet 12, and one of 9 feet 14 inch; one of 12 feet 14, and one of 12 feet 16 inch; one of 10 feet 15, and one of 11 feet 13 inch. H Pieces—Three of 15, 16, and 19 inch; three Horse Whims, Whim Shearers, Beams and Scales, of different sizes, with stands; a quantity of Strapping Plates, Stapies, Glands, Old Junk, and Tramroad and other Iron, Sheds, Ladders, Launders, Barrows, Timber of various dimensions, Smith's Tools, consisting of 1-34 inch Bellows, Anvil, Vice, Screwing Tools, &c., a quantity of Buckets, Rods, and Miners' Tools.

Also, the ACCOUNT HOUSE FURNITURE, consisting of Tables, Chairs, Desks, and various other articles.—The sale will commence at Eleven o'clock in the forenoon of each day precisely.—The above articles may be viewed, and further particulars known, on application to Captain John Lyle, on the mine, or to Messrs. Grylls and Hill, solicitors, Helstone.—Dated Helstone, March 9. 2

COLLIERIES and QUARRIES in DURHAM.—TO BE LET, for a term of years, BY PROPOSAL, all those VALUABLE SEAMS OF COAL under the Manors and Royalties of Willington, Helmington Row, Billy Row Crook, Mown Meadows, Thornley Pit House, Roddymoor, and Stanley allotments; together with TWO EXCELLENT QUARRIES, well adapted for colliery purposes, called Winkey's Gill and Dufold Hill, all situated within the parish of Brancepeth, and county of Durham, belonging to Charles Lyon, Esq.—Proposals to be forwarded to the office of Messrs. Newburn and Hutchinson, solicitors, Darlington; Messrs. Stone and Symonds, solicitors, 68, Chancery-lane, London; or to Messrs. Dunlin, Stable, and Armstrong, solicitors, Newcastle-on-Tyne.

The quality of the above coal was tested before a committee of the House of Commons in 1829, and unanimously declared to be of very superior description.—Immediate possession can be obtained.

Two railways, nearly in a state of completion, approach the above extensive coal fields—viz.: the West Durham, and Auckland and Weardale—thereby rendering the easiest a sea sale, computed between 5 and 6000 acres.

London, March 7. 3

STEEL WORKS AND DWELLING-HOUSES, Smethwick, near Birmingham; easily convertible, if required, to general purposes.—To be LET or SOLD, by PRIVATE CONTRACT, on very advantageous terms, all those very valuable and compact freehold IRON and STEEL WORKS, at Smethwick, three miles from Birmingham, in excellent condition, and capable of great extension, having a large frontage to the canals and good roads, together with the manager's and workmens' houses.—The tools and castings on the premises may be taken at a fair valuation. The above works may be easily converted to any other purpose, and may be let or sold with, or without, a valuable piece of freehold land adjoining, containing about two acres and a half, and having an extensive frontage to the Birmingham Canal. If sold, a part of the purchase money may remain on mortgage. For further particulars apply to Mr. W. S. Harding, solicitor, 32, Waterloo-street, or Mr. M'Michael, accountant, Upper Temple-street, Birmingham. 4

INVESTMENT.—Several persons of respectability having, amongst themselves, formed an ESTABLISHMENT for WORKING a LUCRATIVE PROPERTY, with a capital of £50,000, in shares of £100 each (of which they have agreed to take one-half), will not be disinclined (subject to approval) to admit other responsible persons to unite with them, by taking one, or more, of the spare shares.—Printed particulars, and the fullest information, may be obtained, on application to Mr. James Wilkinson, 59, Old Broad street, London. 5

IRELAND—PROFITABLE INVESTMENT.—WANTED, an ACTIVE PARTNER, who will advance £2000, undertake to reside, and superintend the business of a valuable Slate Mine, which has been explored at considerable expense, is now in a remunerative state of working, and capable of extension. The quality of the slate is excellent, and much approved of, and the locality peculiarly eligible, being but eight Irish miles from the city of Waterford, and two and a half from a boat harbour, communicating with the neighbouring towns of Carrick-on-Suir, Clonmel, and New Ross, and within short distances of several smaller towns, and bounded on one side by a public road. The present machinery worked by water-power. By judicious management a return of 10 per cent. per annum, calculated on £4000, which the advertiser is out of pocket, could be realised from the 1st June next; if the acting partner be found intelligent, of business-like habits, and respectable character, he will be allowed half the nett profit, and 10 per cent. consideration, for his constant superintendence, out of the other half.

In order to afford qualified applicants an opportunity to ascertain the safety of the proposed undertaking, which, at the outset, like most mining speculations, was attended, and, for some time in its progress, doubtful, the candidate who may be chosen will be allowed to superintend, for one or two months, from the 1st May next, the working of the concern; and, by a covenant in the Deed of Partnership, Withdraw therefrom, if, at the termination of such time, it shall not have been demonstrated that, under a skilful system of management, the slate quarry is immediately available to the production of an annual profit of £1000.

Application by principals, or their authorised agents, to Messrs. Richards and Short Butler and Co., 6, Austin-friars, London, who will communicate further particulars.—March 11. 6

Just published, Part I.,

COMBUSTION of COAL, CHEMICALLY & PRACTICALLY CONSIDERED. With coloured plates

By CHARLES WYE WILLIAMS, Esq.

London: Simpkin, Marshall, & Co., and J. Weale, Birmingham: Wrightson & Webb. 7

THE LITERARY GAZETTE FOR FEBRUARY, just pub. lished in its monthly cover, gives proof of its renewed spirit and enterprise, by having, in addition to its usual features, the following original communications:—An authentic Memoir of Sir Alexander Burnes, and various Indian Correspondence relative to his probable fate: An Account of Aden, our last important settlement in Arabia, by Captain Wyman—A Narrative of Mr Eyre's tragical Expedition in the South and West of Australia (1841), the latest from that colony; and several Miller's Description of Remarkable Pyramids in Central America. Intelligence of an interesting nature, from so many remote parts of the earth, seldom finds its list of any journal within the same short period of time. The Literary Gazette also contains reports of the useful and valuable proceedings of several Literary and Scientific Societies, of which no records are furnished elsewhere. Published by W. A. Berigny, at the Literary Gazette Office, No. 7, Wellington-street, Strand. 8

THE LONDON MERCANTILE JOURNAL, published every Tuesday, at the office, No. 42, Mincing-lane, contains sixty-eight columns of closely printed matter, in which is comprised the most accurately compiled Prices Current of the London, Provincial, and Foreign Markets, with correct stock of Imports and Exports; the whole forming, in one sheet, the most complete weekly digest of trade, commerce, and agriculture ever presented to the public. Its contents, free from political bias, are alone devoted to the consideration and discussion of those great mercantile subjects to which Great Britain owes its pre-eminent position among nations; our home, foreign, and colonial trade; ships, colonies, and commerce. To our foreign commercial relations, which have been so long neglected by the public press, particular attention is given. From its extensive and respectable circulation, this journal offers peculiar advantages to the shipping interest, bankers, and public companies, as a medium for advertising. Orders received for advertisements and subscriptions at the office, and by every newsman in the United Kingdom. 9

WILTON'S LONDON JOURNAL of ARTS and SCIENCES, No. CLXIII., for March, illustrated with three plates, will contain the following interesting specifications:—Shergold's Cotton Printing—Townshend's Furnace—Newton's Machinery for making Screws—Cuthbert's Railway Turn-table—Gray's Pottery Moulds—Hall's Pump and Wall's Machine for making Earthenware—Baskin's Wood Pavements—Hall's Gas-meter—Walker's Watercock Engine—Clark's Construction of Tunnels—Bramah's Cane-bottoming Brush—Bullock's Preventive Wash—Kinsey's Rotary Fire-grate. Review of all Patents granted for Artificial Light, by the Editor; as well as The Practical Art of Bookbinding, by Dr. Ure, F.R.S.; Illustrations of the Scenery of Civil Engineering; Scientific Miscellanies—Lives of Scotch, Welsh, and Irish Patents, and Original Phenomena.

Published monthly, price 2s. 6d., by W. Newton, at the office for patents, 66, Chancery-lane, London, and sold by all booksellers, Manchester; Sherwood and Co., Paternoster-row; Simpkin and Marshall, Stationers'-court, and sold by all booksellers. 10

WANTED to PURCHASE, a good SECOND-HAND HIGH-PRESSURE STEAM-ENGINE, about 25-horse power, eight-foot stroke in the cylinder.—Apply to Mr. David Scott, engineer, Flint; or to Mr. James Treweek, Mona Lodge, Anglesey. 11

BAHIA STEAM NAVIGATION COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of this company will be held at the George and Vulture Tavern, George-yard, Lombard-street, in the city of London, on Monday, the 4th of April next, at Twelve for One o'clock precisely, for the purpose of electing a director vice David Cannan, Esq., deceased. Proprietors becoming candidates for the said vacancy are requested to give fourteen days' notice in writing of such their intention at the office of the company, where further particulars of qualification, &c., may be obtained.

By order of the board of directors,

JAMES PAKEMAN, Assistant Sec.

Bahia Steam Navigation Company's office, 13, Lombard-street-chambers, Clement's lane, Lombard-street, London, March 7, 1842. 12

BLAENAVON IRON AND COAL COMPANY.—The directors of this company hereby give notice, that the ANNUAL GENERAL MEETING of the proprietors, advertised to take place on Friday, the 15th of April next, at the London Tavern, Bishopsgate-street, is POSTPONED to Friday, the 22nd of April next, at One for Two o'clock. By order of the board.

Offices, 4, Pancras lane, March 16. RICHARD JOHNSON, Sec. 13

CAMBRIAN IRON AND SPELTER COMPANY.—Notice is hereby given, that the ANNUAL GENERAL MEETING of shareholders in this company will be held at the company's office, 2, Moorgate-street, London, on Thursday, the 31st of March instant, at Twelve for One o'clock precisely.

By order of the board.

21, Moorgate-street, London, March 14. G. F. HUDDEN, Sec. 14

GREAT WHEAL CHARLOTTE MINING ASSOCIATION.—Notice is hereby given, that the HALF YEARLY GENERAL MEETING of the shareholders of this association will be held, at the George and Vulture Tavern, Cornhill, on Tuesday, the 29th inst., at One o'clock precisely.

Laurence Pountney hill, March 11. 15

ROCKS TIN MINING COMPANY.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of registered shareholders in this company will take place at the George and Vulture Tavern, St. Michael's-alley, Cornhill, London, on Thursday, the 7th of April next, pursuant to the deed of settlement. The chair will be taken, and business will commence, at One o'clock p.m. precisely.—London, March 14. HENRY TRISTRAM, Sec. 16

TREGOLLAN MINING COMPANY.—The directors hereby give notice, that all shares in this company whereon any call, or any portion of a call, remains unpaid, are absolutely and irrevocably FORFEITED, and a declaration of such forfeiture has this day been duly signed, in accordance with the regulations endorsed on the scrip certificates; and all such certificates whereon the payment of nine calls, amounting in the whole to £5 per share, is not duly notified, are invalid. By order of the board of directors,

S. BUXTON, Sec.

Tregollan Mining Office, 6, St. Mildred's court, London, March 9. 17

THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonies to its usefulness with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c., &c.:—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall. 18

ANDREW SMITH'S PATENT WIRE ROPES, for standing rigging, lightning conductors, strapping of blocks, mining, railway, and general purposes; about half the size and weight of hempen ropes, and 25 per cent. stronger. Testimonials to that effect, with specimens, may be seen, and every information obtained, at the office, 57, New Broad-street, city; manufactory, Mill-wall, Poplar; and also of the following agents:—

Matthias Dunn	Newcastle-on-Tyne.
Joseph Bothway	Plymouth.
John Thompson and Co.	Wigan.
J. T. Tregellas	Truro.
Thomas Mooney and Son	Dublin.
Perrin and Nolan	Wicklow.
Coates and Young	Belfast.
James Kibble and Co.	Glasgow.
James Gunn	Leith.
J. M. Boutts, Clements's-house, High-street	Dundee.

ANDREW SMITH'S PATENT WIRE ROPE.

This rope has been in use for standing rigging to her Majesty's Navy, and in a great number of merchant vessels, for upwards of six years, and is giving the highest satisfaction; the rope is also employed in various mines and railways in different parts of the kingdom. 19

TO THE MINING INTEREST OF CORNWALL.—SAVING OF FIFTY PER CENT.—J. T. TREGELLAS, Truro, Agent for ANDREW SMITH'S PATENT WIRE ROPES for the county of Cornwall, feels it a particularly pleasing duty, after nearly two years' highly satisfactory trial in the Cornish mines, to report to all concerned, that the result of the said trial has confirmed beyond a doubt his first impression, that a saving of full one-half of the expense of cordage would be effected, and is now effecting, by the use of these ropes, composed of English iron, over those made of Russian hemp.—J. T. Tregellas selects the following testimonials from the many he has received:—

Wheal Mary, Lelant, Oct. 15, 1841.

Sir,—I have much pleasure in informing you that the 2-inch wire rope which you sent me the 6th of July last has fully answered your recommendations, and I have used it to fill five tons and upwards with perfect confidence.

I am, Sir, your's, most respectfully,

Mr. J. T. Tregellas, Truro. ——— (Signed) R. R. MICHELL.

North Roskear Mines, 18th Feb., 1842.

Sir,—The 2½ inch wire rope you sent to these mines has been at work at our 72-inch cylinder steam-whim about five months, drawing from 30 to 370 fathoms, and is not at all the worse for wear—I have examined it daily, and nothing can work better. I shall be happy to show it to any person who may apply, as I consider it the best invention of the kind that has ever been adopted, and from the duty it does, and from the duty it saves, must soon be generally used, and hemp and chain thrown out. The saving of coal is full one-third. From the strains I have seen it submitted to, I pronounce this rope of 2½ inch circumference, to be four times as strong as any 7-16 chain that can be procured. Be particular in having good pulleys and good ropes, and I recommend the attaching of at least thirty fathoms of chain to the end of the rope for the winch. I am, Sir, &c.,

(Signed) JOHN REST, Engineer.

To Mr. J. T. Tregellas, Truro.

P.S.—We are about to put up two more of your wire ropes.

Price 20s. per Cwt., Flat and Small Round the 3cy Cwt. 20

A ½-inch wire rope is a full size white rope, weighs about 1 lbs. per fathom, and will lift eight tons.

A ⅝-inch, which weighs 2 lbs. per fathom, will lift 12 tons.

A flat rope 4 by 2 inch, which weighs 7 lbs. 6 oz. per fathom, will lift 32½ tons.

A flat rope 5½ by 2 inch, which weighs 9 lbs. 12 oz. per fathom, will lift 44 tons.

The wire rope now getting into general use as a tackle rope is one-inch round, which is equal to a strain of one ton.

*** These wire ropes are now at work at the following mines:—Treworvas, Treweigh Consols, Treaphannon, Wheal Mary (Lelant), Wheal Darlington, Thorndy Mines, East Wheal Crofty, North Roskear, Par Consols, North Roskear, Wheal Rock Consols, &c., &c.—They are also in use at the Hayle Copper-mines, Perran, Redruth, and Tankerwell Foundries.—Also for prompt Chain, &c., at Penrose, Penhallow, and many other forges.

Truro, March 1.

THE THAMES TUNNEL is Open every day (except Sunday) from Nine to the morning until Seven in the evening, and is lighted with gas. The entrance at present is on the Surrey side of the river, close to Rotherhithe Church. The Tunnel is now completed, and is 1200 feet in length. Admittance, One Shilling each. Notice.—The Tunnel will be shortly closed to the public, in order to finish the last passage to Limehouse. By order,

J. CHARLISH, Clerk to the Company.

Company's Office, Wellcroft-buildings, Wellcroft, March 1, 1842. 21

N.B.—Conveyances to Rotherhithe, by omnibus, from Piccadilly, Charing Cross, Fleet-street, and Cheapside, every 10 minutes; by steam boats, from Chelsea, Vauxhall, Lambeth, Hungerford, the Old Swan Pier, and London Bridge, to the Tunnel Pier at Wapping. Books, with plates descriptive of the works, are sold at the Tunnel, price One Shilling.

THE LONDON AND DUBLIN BANK.—Capital One Million, with power of increase. In shares of £50 each, in series of 10,000 each; holders of the first series to have a preference over the others. Deposit £10 per share, and not more than £25 per share in addition will be called up in the first two years, payable by instalments of £5 per cent. at intervals of not less than three months.

HONORARY DIRECTORS.

The Most Noble the Marquess of ORMOND.
The Right Hon. the Earl of MOUNTCASHELL.
The Right Hon. the Earl of KINGSTON.
The Right Hon. the Viscount LORTON.
The Right Hon. the Lord CARBERY.
The Right Hon. the Lord CROFTON.
The Right Hon. the Lord DUNALLY.
Sir CHARLES HENRY COOTE, Bart., M.P.
LESLEY ALEXANDER, Esq.

DIRECTORS.

Charles Barry Baldwin, Esq., M.P.	Robert Guinness, Esq.
John Ellerker Bousfield, Esq.	Thomas Hayter Lewsden, Esq.
Francis Carnac Brown, Esq.	William Malcolm, Esq.
Ingram Chapman, Esq.	William Medley, Esq.
George Dunbar, Esq.	John M'Kenzie, Esq.
Vincent Eyre, Esq., jun.	Robert Crichton Wyille, Esq.
James Keith Forbes, Esq.	

With liberty to add to their number.

AGENTS IN LONDON—Messrs. Puget, Brimbridges, and Co., bankers.

SOLICITORS.

Messrs. Farrar and Lake, Doctors' Commons, London; Messrs. Symes and Keller, 5, Leinster-street, Dublin.

It being universally admitted that the most simple and effectual mode of uniting the interests of Great Britain and Ireland is by an exchange of the advantages each enjoys, and as this can be best effected by the monetary connection of banks, with a proprietary belonging to both countries, it is proposed to establish a bank for that purpose, under a single board of direction.'

The advantages conferred on Ireland by the establishment of the Provincial and other banks, as well as the profits made by the shareholders, make it evident that a bank, founded on the same principles, with the practical improvements which experience has suggested, must be an undertaking no less beneficial to Ireland than profitable to the shareholders. That an additional bank in Ireland is wanted may be concluded from the fact that England, with a population of sixteen millions, has 315 private and joint-stock banks, besides 616 branches and agencies, whilst Ireland, with a population of eight millions two hundred thousand—a unit for unit for superior, and with equal local advantages, has only twelve private and joint-stock banks, and but ninety-seven branches and agencies.

By an union of the capitalists of both countries, the commerce and prosperity of both will be most effectually promoted. The rapid increase of Irish exports and imports during the last five years, combined with the desire for the extension of Irish manufactures (an object which will be greatly promoted by a judicious extension of the banking system), and the beneficial influence of the Temperance societies in promoting order and industry, render this an advantageous moment for the establishment of such a bank.

The peculiar merits of the new bank consist—

1. In uniting the direction, by which all the advantages of special boards of management in London and Dublin will be attained, without the double expense.

2. In its being not a bank of issue, and consequently being less exposed to the danger of runs and panics.

3. In its not being obliged to keep a large and unprofitable stock of gold at the branches, or to invest large sums at a low rate of interest in Government securities.

4. In the number of its branches being limited, thereby considerably diminishing the annual charges, as well as risk.

5. In its avoiding all dangerous competition with other banks.

And, finally, in its perfect freedom from sect or party.

The bank will be established under a Deed of Settlement, with a power of suing, and being sued, in the name of one of its officers, and with the most effectual provisions that can be devised for limiting the liability of the shareholders; and, for the security of the proprietors, the deed will also provide that, in the event of one-third of the subscribed capital being lost, it shall be imperative on the directors, or a majority in value of the proprietors present at any meeting, convened by public advertisement, to dissolve the bank.

For the further security of the proprietors three members of the company (not on the direction) shall be elected by the proprietors at each annual meeting as the auditors.—The management of the company's affairs will be confided to one board of directors, acting both in London and Dublin; and it is intended to make such arrangements as will ensure the dispatch and secrecy of a private bank.—The qualification for voting at the yearly meetings of the proprietors, or for the election of the directors, will be—ten shares, one vote; twenty-five, two; fifty, three; and one hundred and upwards, five votes.

Applications for shares, accompanied with a payment of £1 per share in part of the deposit, to be made to Messrs. Farrar and Lake, solicitors, Doctors' Commons, London; Messrs. Symes and Keller, solicitors, Leinster street, Dublin; Messrs. Johnson, Longden, and Co., stock-brokers, 21, Tokenhouse-yard, London; and Messrs. Brown and Symes, stock brokers, Dame-street, Dublin.

* The Provincial Bank of Ireland, established in 1825, pays 8 per cent., besides having given two bonuses to its proprietors; its shares of £25 now sell at £32.—The Northern Banking Company pays 10 per cent., and its original shares of £25 now sell for £36.—The Belfast Banking Company divide 9 per cent., and their shares of £25 now sell for £37 10s. 22

BRISTOL AND EXETER RAILWAY.—CONTRACT FOR WORKS.—Notice is hereby given, that the Directors of the Bristol and Exeter Railway Company will receive, on Saturday, the 26th of March, at Twelve o'clock, at their office, Broad street, Bristol, TENDERS for the execution of the following works:—

CONTRACT, No. 1—D.

The formation of the railway, and the execution of all works connected therewith, excepting the laying of the permanent way, of that portion of the line extending from the field next adjoining the proposed station at Taunton, to the crossing of the Grand Western Canal, in the parish of East Nimehead—a distance of about four miles and 807 chains.

CONTRACT, No. 2—D.

The formation of the railway, and the execution of all works connected therewith, excepting the laying of the permanent way, of that portion of the line extending from the last mentioned contract, to a field in the parish of Wellington, and joining the Wellington and Milverton roads—being a distance of about two miles and forty chains.

CONTRACT, No. 3—D.

The formation of the railway, and the execution of all works connected therewith, excepting the laying of the permanent way, of that portion of the line extending from the last mentioned contract, to a point near Penn's bridge, in the parish of Sampford Arundel—being a distance of about two miles.

Drawings and specifications of the above works will be exhibited at the engineer's office, in Temple Meads, Bristol; and printed forms of tender may be had at the same office, or at the company's office, in Broad-street, on or after Monday, 7th March.—The directors will not consider themselves bound to accept the lowest tender, and they expect the parties to attend at the office, Broad-street, Bristol, at Twelve o'clock, on Saturday, 26th March. By order of the directors,

J. B. BADHAM, Secretary.

Office, 30, Broad-street, Bristol, March 1. 23

NEW AND IMPORTANT WORK FOR ALL CONCERNED IN IRON WORKS.

PRACTICAL TREATISE ON THE MANUFACTURE OF IRON.—J. DORSON, 108, Chestnut-street, Philadelphia (U.S.), proposes to publish, by subscription, the following most important work:—

A COMPLETE THEORETICAL AND PRACTICAL TREATISE ON THE MANUFACTURE OF IRON, 24

Comprising a full account of its different uses, their analyses, &c., the various processes and simple descriptions of the furnaces, forges, rolling mills, &c., &c., with nearly seventy very large plates, which are all drawn to a scale, and may be considered as working drawings—to include a translation of the whole of the great work on Iron of Messrs. Le Blanc and Walter, and contain all its numerous plates, with additions from other sources, and numerous analyses of the coal and iron ores of this country and Europe, together with the statistics of the coal and iron of the United States, and abstracts of the most important patents relating to iron, with critical remarks—also, an Essay on the Smelting of Iron with Anthracite Coal, as now practised in Pennsylvania, by S. W. Roberts, Esq., civil engineer, to be published under the superintendence of J. C. Booth, Esq., professor of chemistry applied to the arts, at the Franklin Institute. It is scarcely necessary to speak of the value of a work, such as this, which must be of the greatest interest to the practical iron master, as well as to every one concerned, either directly or indirectly, in this most important subject. The great French work of Le Blanc and Walter, being confessedly the most complete that has yet appeared, it will be exclusively followed in this, with additions; the plates are all drawn to a scale, which will enable any one to construct, by their means, whatever may be required. The Essay on the Smelting of Iron with Anthracite Coal, by Mr. Roberts, will be found very interesting; it is the production of a gentleman of talents, and of sound judgment and unwearied research, who, highly favoured by his position, has given the subject much attention. The numerous analyses of the coal and iron ores, both of our own country and Europe, will afford much interesting and useful information, while the statistical portion will be drawn from the most authentic sources. Richard C. Taylor, Esq., a gentleman well known for his talents and accuracy in research, has promised his valuable assistance. It is also intended to give abstracts of the most important recent patents relating to iron, accompanied with critical remarks—the whole forming the most complete work on the subject that has yet been published in any country, and the only one of the kind in the English language.

Conditions.—The work will be put to press as soon as there are two hundred names, and but a limited number will be published. It will be published in eight parts, each part to contain eight or more very large iron plates, with the accompanying text. The price per part will be five dollars, payable on delivery. As it is intended to put the work to press as early as possible, gentlemen who may wish to subscribe will confer a favour by transmitting their names to the publisher without delay.

LAW INTELLIGENCE.

IMPORTANT TO SHAREHOLDERS IN JOINT-STOCK UNDERTAKINGS.

COUNTY OF ANTRIM—MARCH 5.

AGRICULTURAL BANK OF IRELAND—WATSON *v.* GREER.—The counsel, in opening this case, stated that the statute on which the corporation called the Agricultural and Commercial Bank was founded, was the 6th of Geo. IV., amended by the 1st of Wm. IV. It was passed for the purpose of enabling certain parties to associate together as a joint-stock banking company. The 10th section enacts that proceedings might be taken against any officer or officers of the company. The next section to which he would direct attention was the 13th. Having directed how the instruments ought to be executed, the statute then proceeds to enact how the judgment is to be proceeded with against the officers whose names may be registered in the stamp-office, and if that fails he has his action against every one of his partners whose names are signed to the registered deed. And the 19th section enacts that if any officer of the company has been proceeded against, all his expenses that he may have incurred in the action shall be paid to him out of the funds of the company. Now, in the case at present under consideration, Solomon Watson has been cast on the part of the company something more than 240*l.*, and he brings his action for the recovery of the amount against Mr. Greer, who denies that he is, or ever was, a member of that corporation. Now they had procured from the stamp office the precise document which was described in the section of the Act just read, which deed is for 1841; that deed for 1842 would not be made out till March next, and there he found the name of Samuel B. Greer in both the documents. It is signed by Mr. Hughes, and clearly established the fact that Mr. Greer was a member of the corporation. From what had fallen from Mr. Holmes he supposed it would be contended that Mr. Greer never signed the deed, and is, therefore, not liable; but he (Mr. Gilmore) was careless whether he did sign it or not. The Legislature had not specified that every one who dealt with the bank should sign its deed, but they had placed such a list in the stamp-office that every one might have recourse to if they wished to examine the character of the company. If they did not do that they would be setting a trap for the public; but that must be placed there, and its correctness certified on oath. If that were not done any man who chose might participate in the profits of a company without being liable to any of its losses. These documents to which he had referred were signed by Mr. Cooper, the Comptroller-General of Stamps; and having proved them, he thought they would have made out a clear case, and entitled themselves to a verdict at the hands of the jury.

The counsel for the defendant said it was sought by this action to saddle Mr. Greer with 240*l.* sold, on account of this *ci-devant* company, called the Agricultural and Commercial Bank of Ireland, and it was attempted so to charge this gentleman on the production of certain documents from the stamp-office, containing the names of certain parties which the officers of that company have thought proper to put in those documents. No doubt the Act contains the provision Mr. Gilmore mentioned, and he must admit that the document was drawn out according to that Act; but he did not admit that it was conclusive evidence for the company. The names were entered there as they appeared in the books of the company, and yet, while it was certified to, it was not, he contended, conclusive evidence. Why, the officers of the company might enter any name they chose in the deed—any of the names of the gentlemen of the jury—therefore the document was not proof. It was admitted that his client had never signed the document in question, and because the officer of the company counts the name of his client was he therefore to become liable? It was monstrous to suppose such a thing. It was a question of law for the learned Judge, that if his client had never put his name to the original document, or authorized any one to do so for him, to say if he were liable, and he relied on his lordship directing a verdict for him.

The COURT—You don't hand in any proof. I hold that the documents were not conclusive evidence, but I hold them to be *prima facie* evidence that the defendant is a member of the company. The only thing not proved is that he signed the document, but that was not required, for another may sell out and his purchase, or he may dispose of his shares and another purchase them, and there was a statement made every year, which held good from March to March, in which all the changes that had taken place during the year were introduced. He wished to state merely that he held the document to be *prima facie* evidence.

Mr. TOMB submitted that it was *prima facie* evidence unless rebutted by other evidence. He again submitted an objection, and that there was some evidence to go to the jury. His client was not, and is not, a member of the company.

The learned JUDGE said it was a very serious question, which might affect great numbers, and had been ably stated on both sides. His direction to the jury would be to find for the plaintiff; but there was a grave question of law which remained to be argued, and if it were found that there was evidence to go to the jury the verdict would be changed into one for the defendant.—The Jury then found a verdict for the plaintiff, as directed by his lordship.

THE NORTHERN RAILWAYS' DISPUTE.

COURT OF CHANCERY—MARCH 12.

THE CLARENCE RAILWAY COMPANY *v.* NORTH OF ENGLAND, CLARENCE AND HARTLEPOOL RAILWAYS.—The LORD CHANCELLOR delivered judgment on this motion, which sought the dissolution of an injunction restraining the defendants from crossing the Clarence Railway by their line. His lordship said it was no doubt a question of great importance, for if the North of England Company succeeded they would become formidable rivals to the Clarence, as regarded the communication with Hartlepool. On the other hand, it was of equal importance to the North of England Company to be permitted to cross, otherwise their whole object would be defeated. But at present the question was a narrow one, and turned upon the construction of an Act of Parliament, both difficult and doubtful, though it was not necessary to give his opinion upon it, because it was properly cognizable in a court of law. His lordship said he must now consider the interests of both companies, each complaining of irremediable injury. But the crossing of their line would only occasion a temporary inconvenience of a few hours to the Clarence Company, while restraining the North of England one, considering the state of their agreement with Mr. Williamson for the purchase of his land, would work them irreparable mischief. The inconveniences to the Clarence Company admitted of any easy pecuniary compensation, while, although the court of law might determine in favour of the North of England Company, Mr. Williamson might destroy the effect by refusing to extend his agreement beyond the 12th of April. His lordship said he was of opinion there had been no needless delay on the part of the defendants, and he thought the balance inclined in favour of their case. The injunction would, therefore, be dissolved so far as it applied to the completion of the works of the North of England Company, effected by the contract with Mr. Williamson. Having varied the order of the Vice Chancellor, there would be no costs, and either party had liberty to apply, if necessary.

PARLIAMENTARY PROCEEDINGS—THE PROPOSED NEW TARIFF.

PROPOSED DUTY ON TIN AND COPPER ORES.

TUESDAY.—Sir C. LEMON begged to ask the right hon. gentleman opposite what was the intention of Government with regard to the duty to be imposed on tin, as he observed that it had been omitted from the schedule in the tariff? He also desired to know what was the amount of duty intended to be imposed upon foreign copper ore imported into this country for smelting? And whether it was intended to lay the duty on copper ore in proportion to the quantity of metal contained in that ore, or merely on the quantity of ore as imported?—Mr. W. E. GLADSTONE, in answer to the hon. bart., said that, as regarded tin, it had been omitted from the tariff in error; it was intended, however, to allow the present duty from 3*l.* 10*s.* the cwt. to 10*l.* a ton, or 12*s.* the cwt., a higher duty being imposed on the importation of metallic tin than other metals in the same stage of preparation, on account of the duty which was levied on that article by the Duchy of Cornwall. With regard to the duty on copper ore, it was intended to do away altogether with the system of smelting in bond, and to make all ore liable to a duty of 5 per cent., *ad valorem*, whether for exportation or consumption at home. As to the hon. baronet's third question, if he desired to know whether it was intended to take 5 per cent. of the market value of the ore, or 5 per cent. of the market value of the copper extracted from the ore, the intention certainly was to take 5 per cent. of the market value of the ore, and not of the copper extracted by smelting.

EXPORT DUTY ON COALS.

Mr. LAWSON said that a deputation from the north of England were desirous to see the right honourable baronet on the subject of the proposed duty on coals before he brought forward his measure, and he, therefore, hoped it might be postponed till a late day after Easter.—Sir R. PEEL said he saw no reason for postponing the measure. The deputation might come to London forthwith.—Mr. LAWSON hoped the right honourable baronet would postpone his measure to a late day.—Sir R. PEEL said he intended to proceed with it on Friday.

Mr. BUNT presented petitions from the General Shipping Company, and from others connected with the shipping trade against the proposed export duty on coals.

THURSDAY.—Mr. M. ATTWOOD moved that an humble address be presented to her Majesty, praying that her Majesty will be graciously pleased to direct her Majesty's consuls, situated in those foreign ports to which British coals are exported, to report what quantities of such coals have been received in those ports during the year 1841, and to state, as far as they are enabled to do so, the purposes to which such coals have been applied.—The motion of the hon. gentleman was agreed to.

IMPORTANT DISCOVERIES IN ELECTRICITY.

Accounts from Paris state that Sir Graves Haughton has discovered that needles made of *any* substance will place themselves at right angles to a wire through which a current of electricity is sent, even with more readiness than those which are magnetic—and for this simple reason, that their movement is not counteracted by polarity. This discovery, he says, must have important consequences upon prevailing views respecting magnetism, as it entirely overturns the hypothesis of Ampère, that terrestrial currents, passing from east to west, are the cause of magnetic polarity; for it is evident, were this the case, all needles freely suspended ought to have the same polarity as the magnet; it being now found that all obey but one law in the presence of electricity, whether current or quiescent. The supposition, therefore, on which Ampère founded his theory of magnetic polarity, and which the well-known experiment of Mr. Barlow with a globe of wood intersected by wires seemed to confirm, has no foundation. Needles of gold, silver, brass, copper, lead, zinc, iron, glass, sealing-wax, ivory, wood, charcoal, leather, card, quill, straw, feather, &c., have been tried; and, by experiments on a great number of other substances, there is no doubt that the law is universal. A simple mode used by Sir Graves Haughton of generating the electric fluid without either machine or pile, has enabled him to arrive at these results, and has further led to what Dr. Faraday thought was impossible—viz., the production, at pleasure, of an absolute charge of either electricity; and he has consequently been enabled to magnetise common sewing-needles by purely negative electricity—the points turned towards the electrifying body acquiring what is popularly called south polarity. The notion, therefore, that electrical phenomena depend merely upon a polar arrangement of matter must now be abandoned by those who favour that theory; and the contest will lie, for the future, between the respective advocates for a single or a double fluid, Sir Graves Haughton holding decidedly for the first, in consequence of indications which he has observed. He has also been led to the inference, that the electric fluid is not the *agent* in what are called attractions and repulsions, but that its presence or absence is simply the *condition* upon which such results take place. The objection to the theory of Franklin, founded upon the mutual repulsion of two bodies negatively electrified, is consequently removed. A detailed account of what is connected with these important facts (which have had more than a year's consideration) will shortly be laid before the scientific world, as well as a *rationale* of electricity, galvanism, and magnetism, founded upon the foregoing and other well-known discoveries, which will demonstrate that these connected sciences are of the utmost simplicity in their first principles, and that all the Protean variety which has been observed in their phenomena, and which might be extended as far as human ingenuity could go, may be all resolved into one proposition—viz., *electrical and magnetical phenomena depend for their variety upon the* NATURE *and* FORM *of the body in which they appear, and the* QUANTITY *of electric fluid present, whether current or quiescent.*

INSTITUTION OF CIVIL ENGINEERS.

MARCH 15.—The proceedings of the evening commenced with a renewal of the discussion upon Kyanising timber, in the course of which a member described some experiments made since the last meeting; the result was, that at a pressure equal to 120 fathoms, a piece of Memel timber had absorbed as much water as doubled its original weight. Another member produced some specimens of Kyanised timber which had been prepared in 1838, 1839, and 1840, they were all in progressive stages of decay. A new process, patented by Mr. Payne, of filling up the pores of timber with various substances, so as to render it almost like stone, and perfectly incombustible, was mentioned; also Dr. Bourchiere's system of saturating timber with various metallic salts, &c., by means of the capillary action going on within the sap vessels of trees as long as vegetable life remains. In the course of the discussion it was elicited that this system had been patented by Mr. Bethell as long ago as 1838, and that the specification of Dr. Bourchiere's patent was almost a literal copy of Mr. Bethell's. The system had not been carried forward in this country because it was found too expensive. Mr. Bethell's system of saturating timber with the oil of coal tar, as practised for the Bristol and Exe or and other railways, was fully described, and appeared to be attended with perfect success. A gentleman connected with the Anti Dry-Rot Company attributed the failure of Kyan's system in many instances to carelessness in the preparation, or the too sparing use of the corrosive sublimate. A letter was read from Mr. Davison, describing some remarkable specimens of timber which had been destroyed by the teredo navalis, and also some of the insects preserved in spirits.—Two papers were then read descriptive of "An Iron Bridge on the Eastern Counties Railway," by Mr. Dobson, and "The Roof of Messrs. Simpson's Factory, at Pimlico," by Mr. Brunstrad; much ingenuity was displayed in the construction and the combination of the materials of the roof and bridge, and the drawings illustrated them very clearly.

NATIONAL BREAKWATER COMPANY.—On the motion that this bill, now before the House of Commons, be read a second time, Captain Fitzroy said, that he felt it his duty to call the attention of the House and the public to the company about to be formed under the bill then before them, with a view to induce those who were disposed to think favourably of the speculation to think a little before they gave it their sanction. His decided opinion was that these floating breakwaters would not last more than three or four years, unless they were protected by some metallic substance. The worms also would penetrate through them and destroy their buoyancy, and the chains by which they were adjusted and held in their places would rust, and wear away very fast. Such, at least, was the case with the chains attached to the buoys put down by the Trinity House, which they were obliged to examine every six months, and which seldom lasted more than five or six years.

CONSUMPTION OF SMOKE.—We are happy to learn that, in consequence of the perfect success of Mr. Samuel Hall's patent apparatus for the consumption of smoke, as applied to the *Bee* locomotive engine on the Midland Counties Railway, the directors of that company are applying it to another of their engines, the *Wolf*, which will be ready in a few days. It was put to the *Bee* locomotive about a week ago, and is now in daily operation on the Birmingham and Derby Junction Railway. Its accurate consumption of smoke is highly interesting, and deserving of the inspection of the scientific world.—*Derby Reporter.*

EARTHQUAKES IN CORNWALL.—We find that the statement, inserted in our last, in Mr. R. Hunt's notice of the recent earthquake in Cornwall, respecting the kibble filler at Wheal Basset leaving his work and going to surface, in consequence of the disturbance, was not true; and, our correspondent adds, "it is exceedingly difficult to get correct information about this same earthquake."

LECTURES ON GEOLOGY.—A course of six lectures on geology is in course of delivery by Mr. Looney, F.G.S., of Manchester, at the Rhodes Mechanics' Institution; we are glad to learn, that the first of the series was numerously attended, and that the auditory departed highly gratified with the intellectual enjoyment afforded by the lecturer, in his explanation of the geological science, the duration of geological periods, chemical data as to the exterior parts of the earth, connection of geology with astronomy, nebular theory of the universe, form of rock masses, declination of strata, origin of stratified and unstratified rocks, granite, volcanic agency, modern eruptions, &c.

MURIATIC ACID.—At the meeting of the Royal Medico-Botanical Society, on the 9th inst. (Dr. Sigmund in the chair), a communication was read from M. du Pasquier, on the presence of a notable quantity of arsenic in the muriatic acid of commerce, and in the acid purified for chemical and pharmaceutical purposes. The author's attention was first directed to this subject by finding that, when testing zinc for arsenic in Marsh's apparatus, the muriatic acid yielded indisputable evidence of the presence of arsenic, while the sulphuric acid gave negative results; he then instituted a series of experiments on the muriatic acids in use in his laboratory, both pure and impure, which clearly demonstrated that a large quantity of arsenic was contained therein. The source of the poison was traced to the sulphuric acid used in its preparation, and which was made from copper pyrites, containing a quantity of sulphuret of arsenic. The author directed attention to the fact, that muriatic acid is employed in pharmacy, in manufactures, and in chemical and medico-legal researches; in all these instances the presence of arsenic must be exceedingly injurious; the acid, therefore, should always be tested with the utmost care.

RAISING OF THE SURFACE OF LAND IN SWEDEN.—In Sweden, as well as in Italy, the land rises constantly from out of the basin of the surrounding sea; this operation takes place very slowly and gradually, yet it seems without interruption. According to the late observations of M. Nicollini, the Neapolitan geologist, the land of the west coast of Italy has risen, from the year 1823 to 1839, 113 millimetres. The same fact has been long observed in Sweden, but never yet ascertained by any accurate admeasurement.

COAL MINES OF PRUSSIA.

In the Journal of the 26th February last we published some observations on the mineral produce of *Prussia*, referring more particularly to iron and its elaboration, as exercising the largest share of influence upon the extension and improvement of textile and other manufactures. As of greater importance still, perhaps, because first in the order of those elementary substances on the abundance and working of which the general industrial prosperity depends, the coal mines of that country, with the present state and prospects of their productiveness, must be a subject of considerable interest, not alone to the large class engaged in the same branch of industry in this country, but with the manufacturing interests at large, as well as with scientific inquirers in general. The coal mines of the provinces of Silesia, Westphalia, and the Rhine have become gradually, but remarkably, productive. The Prussian province of Saxony furnishes very little black coal of good quality; but, on the contrary, it produces a large quantity of *braunkohlen*, or brown coal—a coal of brownish hue, much inferior in quality to the ordinary black coal, being not so hard, and much poorer, in ignitable matter, and consequently of less value. It may be said to hold a middle rank between mineral coal and turf, and is chiefly consumed in the province itself, within a limited range around the places where extracted.

The total value of the coal obtained from the mines in Prussia, in 1839, was calculated at 5,132,826 thalers, or dollars, or, at 2*s.* 10½*d.* sterling the thaler, in round numbers about 743,200*l.* The comparison between the value of coal extracted and of metals is as 23 to 73; and as to the numbers of labourers employed, as 39 to 62. Throughout the whole extent of the kingdom of Prussia 364 coal mines were worked in 1839, the date of the latest returns made public, which altogether yielded 12,213,160 tons of coal (the Prussian ton, however, weighing only, in coal weights and measures there, four quintals, or *centners*, of about 110 lbs. each), or 48,852,640 quintals, constituting a total value of 4,779,628 thalers; the difference betwixt this lesser amount and the larger estimate before given, being made up by casual production and superficial workings. According to the value thus stated, the mean price of sale on the spot, or at the pit's mouth, should be rather less than three *silbergros*, or about 3½*d.* per quintal (of 110 lbs.) or per *scheffel*—a measure equal to a fraction more than one and a half imperial bushels. The workings of the coal mines gave employment altogether to 19,370 labourers—making, with their families, a total of 44,170 individuals owing the means of existence to the production of this combustible.

No branch of mining industry in the Prussian states has been more largely developed, since its origin, than that of coal, as the following figures relative to the production and the ratio of increase (in tons) will serve to show:—

		Rate of increase from one period to another.
1819	4,492,627	
1824	6,090,504	from 1819 to 1824, 36·6 *per cent.*
1829	6,837,733	„ 1824 „ 1829, 12·2 „
1834	8,324,510	„ 1829 „ 1834, 21·7 „
1839	12,213,160	„ 1834 „ 1839, 46·7 „

The mean annual increase during a series of twenty years has, therefore, been nearly 6 per cent., and from 1829 to 1839 not far short of 120 per cent. The largest rate of increase in any of the terms of five years each, it is worthy of notice, dates from 1834 to 1839. Now, it was in 1834 that the Prussian, or Germanic, Custom-house league was finally formed and completed, with the exception of Frankfort, and two or three other of the lesser members, which have since acceded; and, from the completion of that league, it is, doubtless, that German and Prussian manufactures have received so strong an impulse and progression, and that, consequently, the increased consumption of coal leading to a greater demand, has encouraged the application of more capital and industry to the opening and working of mines. It is worthy of remark, moreover, that during all the lapse of those twenty years the price of coal, notwithstanding its extended consumption, has remained the same, within a very trifling variation. In 1819 the price was 2½ silbergros *per quintal*; it has since augmented only by one-sixth of a gross—that is, in the proportion of 33 to 35, or about 6 per cent. only. The increase in the price of wood, although varying according to the different provinces, has, on the contrary, been considerably more during the same twenty years, and may be estimated at the mean rate of advance of 50 per cent. in the three provinces where the coal mines are situate and coal produced. Thus the iron, with other metal, works and manufactures which necessarily require much fuel, can exist and prosper only in the vicinity of the coal mines, and there only where the means of transport are convenient and economical. The following statement (in tons) gives the details of the coal production per province:—

Province of Silesia	1819		1,429,167
„ „	1824		2,778,020
„ „	1829		2,307,645
„ „	1834		2,416,033
„ „	1839		3,576,750
Province of Westphalia	1819		1,851,341
„ „	1824		1,929,222
„ „	1829		2,611,402
„ „	1834		3,831,693
„ „	1839		5,034,958
Province of the Rhine	1819		1,165,957
„ „	1824		1,423,642
„ „	1829		1,853,837
„ „	1834		2,008,800
„ „	1839		3,514,815

Since 1830 coal mining enterprise, or, as in French it would be more appropriately and significantly rendered, the *exploitation* of coal, for which the English language, the land of mines as Great Britain is, affords no word of adequate expressiveness, having been favoured by the increased facilities of carriage upon the Rodr and the Rhine, large quantities of coal have been dispatched to Holland from the provinces of Westphalia and the Rhine, and particularly from the district of Trèves to France, Bavaria Rhenane, and the Grand Duchy of Baden. The export from Silesia to Cracow and the Austrian States is unimportant. The countries somewhat distant from the Prussian coal mines, where no sufficiently cheap means of carriage exist naturally, prefer to supply themselves with English coal, which can be imported at low rates of freight, and not unfrequently as ballast, into Stettin and other Baltic ports. The provinces of Pomerania, Brandenburgh, and Prussian Saxony are principally supplied through these ports. Sometimes it occurs that foreign coal is imported from Schaumburg and Belgium, for example, by way of Minden and Kaldenkerchen, into the Prussian provinces of Westphalia and the Rhine.

Those districts of the Prussian states where the *exploitation* of mines of all kinds is most vigorously pursued are—Oppeln, Merseburg, Arnsberg, Trèves, Aix-la-Chapelle, and Dusseldorf. Mining enterprise is of less importance in the districts of Breslau, Liegnitz, Magdeburg, Erfort, Munster, Minden, Cologne, and Coblentz. The influence which the working of coal mines, and of mines in general, exercises upon the condition of the Prussian population—a population of some 14,000,000—may be appreciated by the number of workpeople who derive, and, therefore, depend upon, their means of living from that source. In 1839 the statistical account stood thus:—

	Labourers.	With families.
In the district of Oppeln	11,799	36,810
„ Arnsberg	10,456	35,056
„ Trèves	5,961	26,514
„ Aix-la-Chapelle	6,865	23,102
„ Merseberg	5,430	20,059
„ Dusseldorf	5,035	19,398
Totals	45,505	163,169

These six districts contain nearly seven-tenths of the mining labourers and population of Prussia dependent for subsistence on mining industry.

GEOLOGY OF THE CHATHAM ISLANDS.—A memoir, communicated by Dr. E. Dieffenbach, was read a short time since at the Geographical Society, from which we learn that the whole surface of the chief island, which abounds in fuel, provisions, and water, is estimated at 385,280 acres, of which 57,600 at least are occupied by lakes; of the remaining 274,680 acres, 100,000 may be regarded as good and cultivable land, the rest being fit for the greater part, fit for pasturage. The hills are of volcanic origin, and furnish an excellent material for building and for roads; none of these hills exceed 800 feet in elevation. It is from one of these that the island takes its name of Waverkauri. In the interior of the island there are large boulders of the same nature as the rocks, covering basin shaped depressions of the surface. The natives have no recollection of an earthquake. Besides the volcanic formation, there are stratified rocks of aqueous origin. The slate breaks into slabs, which may be used in building. Besides these rocks, there is a conglomerate containing nodules of dark shining lumps like iron ore, and on the beach of the northern coast horizontal strata-cations of a dark green sand of comminuted shells, of calcareous breccia and other deposited strata. Lime may be obtained in sufficient quantity from the calcareous beds of this formation. In some parts of the island the formation is almost wholly of stems of trees in the state of lignite, in others it is peaty. Having described in great detail the geology of the island, the memoir then describes the nature of the soil, which, when the plough has entered it, will in the worst parts prove to be a rich land, both for grain and meadows. The rise of the land affords good drainage. The island is surrounded by a girdle of trees and fern. In one place the soil has become ignited, and burns slowly under the surface. Some of the streams of the island have black water, though quite clear, and excellent for all purposes.

GEOLOGY.—A NEW SYSTEM OF PHILOSOPHY.—No. X.

BY HENRY GRAHAM MONTAGUE, ESQ.

PHENOMENA OF THE DESERTS.

Wisdom drops a tear for the sufferings, for the follies of mankind. She sees—and weeps to see earth's proudest hope lie grovelling in the dust—the immortal gem of beauty dimmed by fear and folly. She would clothe man with knowledge as with a garment—she opens her arms to receive him as would a parent, her cherished favourite child—she displays her most tempting viands, reveals her most hidden treasures, and invites him to enjoyment; but her voice is neglected, her commands are despised—her treasures are exposed in vain—her love is returned with hate—the budding flower gives way to the cankerworm—the heart of joy is turned into mourning—the wine of knowledge is converted into the gall of bitterness.

Men fear the spread of knowledge, and fear they know not why. Is not light better than darkness? Is not a blooming garden better than a solitary flower? Is not the reason of man infinitely superior to the reason of animals? How long shall the feast of one cause the tears of ten thousand? Who is he, in the subtilty of words, seeking to prove that knowledge is hurtful to mankind? Even he who finds pleasure and profit in ignorance—even he whose iron heel is placed on the necks of his fellow-creatures. The lion condemns the speed of the antelope—the rapid flight of the swallow is condemned by the falcon—even so is knowledge condemned by man, who revels in the miseries of his fellows. Knowledge is the light of the world—it burns with a steady-during flame, but the spark of folly, fanned into greatness, quickly consumes itself. The steed, in his native wildness, requires the bit of iron and the rowelled spur, but, brought on the *ménage*, his dormant faculties called forth, the child may guide him with a silken thread. As the light of the clear blue heavens to the emancipated captive, so does wisdom appear oppressively dazzling; she smiles, and nations rejoice in the light of her countenance—she speaks, and prosperity waits on the footsteps of industry; the emanations of her greatness clothe princes with honour, and the nobles of the earth with consideration and respect. "Come hither!" she cries to the child of mortality, "listen to my voice, and become great." The eagle flutters on the wing long ere it forsakes its nest, but, taught by me, it acquires knowledge to direct, and strength to sustain its flight. Learn from her, oh weak of intellect—nestling in thy prejudices—accursed in thy fears, thy life passeth away as the shadows of the morning. Why shouldst thou fear? Does the eagle repent her flight? Does she disdain the feathery shaft on which she is suspended?—and thou, with eager mind, prepared, like earth's rich soil, awaiting summer rains—wilt thou not take thy flight with Nature—Reason—Wisdom, for thy guide?

It is anything but pleasing or instructive, to the young mind thirsting after knowledge, to have to wade through the barbarous jargon of terms and inductive speculations of our modern philosophers—to have to steer his vessel through the troubled shoals of controversy without rudder or compass. The torrent, the whirlwind, and the volcano bringing death, desolation, and change, too often paralise the faculties of man, baffle his conceptions, deride his feebler powers, and defeat his intents and purposes; thus, in the timidity of his nature, he is taught to fear them, and, in fearing, to throw the veil of mystery over their unseen but manifest operations. The mundane egg of the ancient Egyptians is a beautiful philosophic truth, disguised in the wild romance of Paganism, allegorically pourtraying the generating powers of the sun and the productive capacities of the earth; but far otherwise are the conceptions of modern geologists, who, while they affect to sneer at these children of Nature, rush into greater absurdities in seeking to obscure the life-giving emanations of the sun by the contemptible light of volcanoes. The interior of the earth is, in fact, a wonderful laboratory for many of our modern worshippers of Pluto, in which the never-failing sword is found to cut the gordian knot woven in the workings of Nature; from this source one draws his stores of flint, another his inexhaustible supplies of hot-water, and numerous others their thousand and one probabilities: in this great hall of the cyclops all the crystalline rocks are manufactured, and are protruded upwards, in their beautiful uniformity, and in their grandeur of composition and character; and from these rocks, in decomposition, are produced the sands, pebbles, and clays.

It is a fact well known that gelatinous matter, whether the same be the produce of animal or vegetable life, or is reproduced in the decomposition of bodies, favours the conglomeration of silica and the process of petrifaction, in all parts of the world, but more particularly so in tropical regions, where animal and vegetable production is in excess; thus it is many springs and rivers, holding in solution these matters, speedily convert organic bodies, and aggregates of bodies, into conglomerate; sometimes the ocean waters possess the like properties, of which the island Ascension is an illustration, where the siliceous qualities of the waters are such as to cause the animal and vegetable matters thrown upon the shores to unite in one vast consolidated mass, the like causes, as previously explained, give origin to the petrifactions and conglomerates of the Deserts. It is to be observed, that so long as the sands are exposed to the action of heat alone, so long do they continue little unchanged in their parts and qualities; but no sooner do they become exposed to the conjoint affections of heat and moisture, than the changing process becomes apparent—the nature of the change depending on the nature of the material, which is at all times variable; thus the waters, percolating through the sand strata, near the bed of the Nile and other streams and freshes, these sands become saturated throughout a given extent, and the waters, in their turn, become the conductors of the electric action, which, passing through the whole, disposes it to enter into new combinations—the minuter particles of sand in aggregate becoming small granular siliceous bodies; if there be lime within the mass it aggregates also, towards a given centre in the line of action, and the ultimate result is a vein, or veins, of quartz; the iron also disposes itself in bands, and sometimes gives the sand a lamellated texture; but, if in abundance, it is diffused throughout, being as one with the whole in the several changes. Again, many of the granular particles gradually assume the form of milk quartz, while others, consisting of more indefinite admixtures, assume a variety of colours and appearance. As the oxygen of the atmosphere and of the waters enters the mass, so its bulk of aggregate and its specific gravity increases, and in the general expansion of the granular particles cohesion naturally takes place, the crystalline structure being prevented by the pressure and simultaneous expansion of surrounding particles.

To the better understanding of these phenomena of production and progressive change, let those who have opportunities of visiting the British Museum, pause for a short time as they pass through the Egyptian Gallery, and carefully examine the material of the antiquities surrounding them. The figure, No. 4, is sandstone of a fine quality, containing iron; upon examining the back of the head, which is in its natural state, and unmarked by the chisel, it exhibits the phenomena as above-mentioned—the granular particles being simply agglutinated, some of them being transparent and crystalline, others variably so, and others, again, of a dull earthy appearance, all, however, firmly united to each other, and in varying degree of change; the front of the figure, which, previous to being quarried, was more immediately exposed to the action of the sun, has evidently become more highly crystalline, and exhibits, in its bands and zones, the usual phenomena, or adaptation of parts, as developed in smaller siliceous aggregates, when exposed to the conjoint influences of heat and moisture. Here and there larger aggregates, or nodular concretions, are exhibited, passing also through their successive stages of change, but interrupted in three changes, and, consequently, in the contemplated result, by the rough hand of the quarryman. Pass on to figure No. 6—here we have what is termed *breccia*, which geologists will tell you is produced in the decomposition of quartz rock; but this is one of the numerous errors of generalisation which disfigure this otherwise beautiful branch of philosophy. In substance this material is not u like the common coarse gravel of this country, but the aggregates are, perhaps, in a more advanced stage of change, for a petrifaction, under this latitude, continues in this state ages after age—the causes necessary to effect the change not being in action. The larger aggregates, parting with some portion of their primary material, have become more purely siliceous, assuming the crystalline texture; but the result, as one whole, is evidently imperfect, it being simply a conglomerate, and as such readily separable in its parts. Within the mass will be observed aggregates of flint, calcedony, and jasper, and in and throughout the whole, it will be observed, that the aggregates are of indefinite form, and such as is observed in many species of granite; that the quartz is not crystalline, but becomes more translucent in the rearrangement of its atomic particles, consequent on the accession of atmospheric air and the disengagement of other products. As the form of the pebble is now, so was it previous to its present appearance, when existing independent of its matrix.

It has often been asked—"Do pebbles grow?" They do not, but atomic particles and aggregate, as is exemplified on this large scale, cohere, and form consolidated bodies; thus numerous atomic particles aggregate together, as particles of iron around a magnet, but permanently united by the one common base, and larger aggregates unite as conglomerate, and this conglomerate, acted upon by atmospheric heat, becomes pudding-stone, or other kinds of rock. The rocks, or stones, once crystalline, will not cohere, but under peculiar circumstances, such as the presence of the crystallising waters; but this is often the case in Nature, where two or more beds, for instance, as those which, in ultimate results, are known as granite and gneiss, undergo simultaneous change. Again, in beds of earth or clay, containing lime or iron, the electric matter is conducted into, and awakens chemical action in these compounds, forming calc spar, which embraces at times portions of the earths affected by this action, or otherwise varieties of ironstone, pyrites, &c.

Figure 7 is of fine sandstone, and but slightly adhesive; in No. 8, the sands have many of them become opallescent, or translucent, and crystalline. Upon examining the granites, most of them will be observed of coarse grain, confusedly arranged, exhibiting the like nodular appearance to No. 6, but in a more highly crystalline state. The texture invariably depends on the nature of the primary material from which, and in which, it is produced; thus, if the sands unite with the oceanic marls or calcareous deposits in the process of change, occasioned by atmospheric influences, the result will be a very fine-grained grey granite. The change is a result of long-continued action, perhaps for centuries; and one great reason why fossil remains are so seldom found imbedded in granite is, that sands holding fresh water in union are inimical to the preservation of bodies; but mark the granite material of our London bridges, and other buildings of like nature, and, as is there evidenced, although the fossil body has lost its internal configuration, yet have they the external form and the characteristics of the body in quartz nodules; and not only this, but we have the distinct evidence of fossil bodies enclosed in granite, of highly crystalline texture, before us. In bays and troughs of tropical seas there is always an accumulating fine calcareous deposit, formed and forming, from the comminuted particles of coral and shell-bearing animals, and this marl is sometimes of considerable depth, and invariably free from fossil bodies, unless they be of a nature to resist decomposition; in receiving other matters upon its surface, and being afterwards elevated above the waters, and exposed to tropical influences, it gradually indurates, and the result is exemplified in tomb 17 in this gallery.

Who can look at the two large tombs, and pronounce them to be the products of fusion; they are conglomerates, the decomposed material being of the nature of the tomb above noticed, but including, in its composition, a variety of animal and vegetable remains, the animal bodies having partially decomposed before the crystallising process began, and the aggregates changing, according to their compound qualities, into quartz, felspar, jasper, calcedony, or mica, and similating with many of the shell marbles, which in general exhibit partial decomposition.

It is well known to the quarrymen of this country, that the granite is softer as it descends into the earth, and that its degree of hardness depends as often upon the nature of its position as upon its peculiar material—that sometimes it may almost be said to be in a state of decomposition, hardening only on exposure to the atmosphere. How do theorists reconcile this with their ideas of central heat, and not only this, but the well-known fact, that the vast portion of our crystalline and translucent bodies acquire this finish by atmospheric action alone? Let us look at the Cornish mines; here the tin sometimes forms full three-fourths of the bulk of aggregate of the granite, being naturally one of its integrals, and containing, in its own body, a large proportion of atmospheric air; like other minerals, it is sometimes found in beds, the same being more or less united with the matrix; it is sometimes found in veins, assuming a polarity of disposition, the electro-chemical action being guided by the veins of quartz or iron which were previously formed in the disintegrated mass, the metallic bases separating from the siliceous base, and uniting, as the forces of electric action and affinity direct; it is very often, in like manner with copper and iron, as one with the material, although variably disposed in its quantities; it is, in its native state, blending with inflammable bodies, and which are evidently proximate causes of its production. We will admit that, sometimes it is produced in fissures, and perhaps, too, in natural cavities, in some instances showing its recent origin, but still the fact remains, that tin forms an integral part of granite, together with sulphur and other inflammable products. It is evident that, in this state, it could never have been the subject of heat of fusion, otherwise the usual phenomena would have ensued; instead of veins and lodes, we should have had a strange amalgam of volcanic products, of many metals and earths, the sulphur and other inflammable products being driven off. The few volcanic products are well known to us, as are also the causes of effects produced; here the minerals are forcibly withdrawn from their native beds, and scattered over the surface of the earth, the action being manifest in the result; but in native beds the phenomena speak a different language, an undisturbed strata, and a succession of ages, or, where disturbed, the causes being in general remote from the body acted upon. Admitting that the metal was an after formation, then must we admit a radical change in the matrix, decomposition, and recombination, and admitting it must come to the conclusion that crystalline rocks can be formed by atmospheric heat. Again, the material ejected from craters of volcanoes, it cannot even be pretended, is ever known to be in the crystalline state; it is water, mud, fragments of rock, disengaged gases, or melted material, as the case may be; if lava, on cooling down, it consolidates, and its cells crystallise, but it never assumes the crystalline texture like granite, and the act of crystallising is determined by water or atmospheric action. In the Deserts the phenomena of production are strikingly manifest, even to the ultimate union of the metals with the mineral beds; thus, where sulphur and the oxide of iron abound in the sands, as the latter, in union, assume the granular form, so the like manifest action occasioning this change gradually produces iron pyrites, and the ultimate result is a granite of coarse grain, more or less abounding in iron. Again, manganese enters into the composition of porphyry, generally diffused or locally aggregated.

Our rising generation, thankful for the numerous beautiful facts discovered by the zeal and perseverance of geologists, would gladly avail themselves of those facts, under the guidance of men experienced in the ways of Nature; but such can never be the case while they are so interwoven with false inductions, marvellous absurdities, and crude generalisations. Geology is said to be a science of observation, and yet it cannot be received without inductive science, of the truth or falsehood of which the young mind is incapable of judging, and, in the multiplicity of opinions, is little disposed to receive. The object of the inquiring mind is to understand the ways of Nature, and, in understanding, to render her tributary, to a greater extent, to our wants and purposes; but this cannot be done by observing men training their ideas to the prejudices or fashions of the day, or by discouraging all attempts to discover the *modus operandi* of Nature. Men must, of necessity, rely, to a great extent, on the opinions and discoveries of the few, and this alone should deter us from drawing largely upon their credulity or fears.

Much stress has been laid upon the increase of temperature of the interior of the earth as we descend, as demonstrated in mines, and in the recent labours of M. Agassiz; upon this head I shall speak more fully hereafter, contenting myself at present with observing, that the causes of such increase of temperature, where it is manifest, are inevitable results of chemical combination of atmospheric air with the liberated gases, or combinations of the latter; and if in some of the lowest depths of the earth hitherto arrived at we find a manifest increase of temperature, as, in other depths, we find little or no change, and in some an increase of cold. Did the heat, as conjectured, radiate from the interior of the earth, and increase in ratio, as found in some diggings, then must it, of necessity, be very great at the lower depths of the ocean, and being so would be manifest to. The same phenomena of increase is manifest in the mines of Mexico, 6000 or 9000 feet above the level of the sea, as is manifest in the digging of the Paris basin; nor are hot springs, at all times, manifestations of the existence of internal fire, for the waters, in their passage through the earth, of necessity bring together numerous conducting elements, which, in union, and consequent chemical action, induce heat—and, indeed, nearly all the hot waters, not seated in the vicinity of volcanoes, hold in solution certain mineral bodies; nor could we, even were we to entertain the notion of an internal fire, suppose for a moment that these springs were so deeply seated as to be affected by this internal heat.

The fact of granite protruding through the overlying beds, furnishes but a lame argument for the Plutonist, for we have only to look at the unequal distribution of matter within the ocean bed, to be convinced of its fallacy. Supposing, for illustration, we take the Phenomena of Production, as now going on in tropical seas; here, in the increase of oceanic matter submarine hills and chains of hills are formed, the great rivers bringing down their periodical sum of terrestrial matters, and these matters are deposited in the valleys, thus encircling the lower portion of the hills, which, still increasing, continue to stand above the increasing periodical deposits; sometimes, where these elevations are superficial, the deposits may cover them entirely. In after ages, when this portion of the earth is elevated above the waters, the submarine hill, in its series of changes, passes into granite, or some other species of rock, and the deposited material, being the debris of terrestrial and oceanic matters, in its ultimate consolidation, becomes schistose; the material brought together by the accidents of local circumstances undergoes a variety of changes in its parts and quantities, the disposition of compounds being regulated by the forces of affinity, cohesion, and lateral pressure of surrounding particles, the end marked out being attained when the operations of Nature are undisturbed, matter being at all times the subject of surrounding influences.

The granite of the valleys of the Deserts partake, in general, more of the nature of sandstone than do the granites of the mountains, which latter contain a greater variety of compound bodies; they are also dome-shaped, or in large conglomerate masses, without any true geometrical form; but the granites of the mountains very often present their perpendicular faces to the plains and valleys, and extend in parrallel or curvilinear lines, in the like manner of the limestone ranges; their appearance above the waters being naturally accounted for in the constant decrease of the waters from the surface of the earth; the material of the waters becoming the material of consolidated bodies—their consolidation and increasing specific gravity, and ultimate crystallisation, being induced by the union of the uniform, aqueous, and gaseous bodies with each other, united and uniting with silica, which, but slightly affected by these changes, acts as the common bond of union or cement of the whole. The sands with larger concretions being the chief, and, sometimes, the sole material of many species of granite, and being capable, under numerous affections, of assuming this state ultimately, it should not be made a matter of surprise that the granite should be found in the lowest depths with which we are acquainted; but was I, in imitation of others, to enter into speculations on this matter, I should certainly hazard the opinion that the granites of the lower beds almost invariably rest upon sands or sandstone, or gradually pass into that material.

The assertion of geologists, that the whole of the upper crust of the earth rests on a granitic floor, is purely hypothetical, and not only unwarranted, but expressly contradicted by every day's discoveries. From all that we can observe of the nature and composition of this planetary body, we find no efficient reason to generalise on single phenomenon; the numerous beds of the earth are all variably disposed, without order or disposition, beyond that which is of necessity produced by long-continued local action, and all of them affecting, or affected, by contiguous beds, as their nature, and the action manifest, may determine. The lowest beds have been found granitic, but the extent of these beds is comparatively nothing to the more frequent phenomena of sands and sandstone. If men are to be permitted to generalise in this manner, on local facts, there will be no end to the vain imaginings of those who have the ambition to become founders of systems, and, as is exemplified in this instance, of necessity, blind leaders of the blind. The late researches into the strata of the United States of America, shows that, although granite is common both above and below the surface, the sands, limestones, and marls, of varieties, are by far the most abundant, and the like results are manifest in all other quarters of the globe. Where, I would ask, is this granitic floor, and at what depth is it to be found in the Deserts? the greatest depths ever arrived at in search of water give crystalline rocks lying upon sand, sandstone, calcareous strata, marls, and sometimes beds of salt; and, in the Sora Desert, we find granite resting on a bed of clay, all these crystalline rocks resting in an[on undisturbed strata. Positive assertion in this matter, even when backed by superficial observation, cannot be received as positive proof; but it is certain that this granitic floor has never been reached; and it is equally certain, in despite of the carrying powers of the waters, and of co orgs, that many of the granitic formations, embracing vast areas, are based upon other species of beds.

The late experiments of M. Agassiz, in digging for hot water in the Paris basin, as it is termed, are anything but gratifying to those theorists, or to the observing public—originating in a false conception of the phenomena of Nature, they have ended, as all such experiments must end, in mortification and disappointment to those who were so sanguine of success; they found no granitic floor, no hot water, and the increasing heat in descent was such only as to show the utter inutility, not to say absurdity, of theoretic calculation on local phenomena. But the lessen is lost upon the Geological Magi, who, in their crusade against Nature, are continually found stumbling on discoveries, which immediately are arrayed in evidence against their systems. The like fatality attends mining adventurers, who if not fortunately prevented by the waters, or by the increasing expense, would continue their labours *ad infinitum*, although in the production of metals, as in the production of rock, there is always a limit defined by Nature.

The very term "volcanic product" is, in fact, an absurdity, for whatever is ejected from the mouth of a volcano has an equal right to this term, if it is to be applied; thus, many of the volcanoes of the earth eject vegetable earth as mud, streams of water—and Humboldt assures us that fish are very often cast forth in these torrents, being of the same kinds as found in the neighbouring lakes. Again, there are fragments of rocks, metallic bodies, scorias, the skeletons of rock, as pumexice, and melted matter; admitting that the latter concentrates and assumes the form of rock, as it sometimes does, still the material is known to us in all its stages of change, of decomposition, and recombination, as being the product of inner, and generally of superficial, beds of the earth, ever varying in its nature, the action manifest uniting or destroying all bodies coming within its influence; the act of the fire is to displace and not to produce; nor does it produce other than obsidian, lava, volcanic scorias, &c.; we might, with equal foundation, apply the like term to the ashes of our grates, and to all works of use or ornament made with the agency of heat.

That much of the lava, on analysis, corresponds with the material of granite is very natural to suppose, for of such is the composition of all rocks; but this fact is in direct negation to the theory of volcanic rocks, for if this material was ejected from the molten matter of the interior of the earth, then must we suppose such matter to be uniform, or nearly so, while in its state of fusion; and if the crater be a mere safety-valve, the matter ejected must also be uniform; but such is not the case, for as is recorded by numerous observers, the molten matters ejected at each eruption of a volcano invariably differ in composition and character. Again, when tin enters the composition of granite it is superficial, and seldom descends to any considerable depth, tin being one of the chief ingredients; but when copper enters its composition the metal is deep seated, water being one of its chief ingredients; but in the recent lavas we find neither the one nor the other, and the more ancient lavas generally gradually decompose as they become exposed to atmospheric influence. But, say geologists, the causes of effects manifest as granite have ceased; but still volcanic action is manifest in various parts of the world. Again, they say that granite is the central crust, thrown up by expansion of some portion of the inner circle; but, if so, why this infinite variety in its composition and character? Every child of science is now aware that like causes produce like effects, and, therefore, it is that if like causes were formerly manifest, like effects must, of necessity, have been produced.

HOT SPRINGS IN ABYSSINIA.—A memoir was read at a late meeting of the Paris Academy of Sciences, by M. Combes, "On the Sulphureous Hot Springs of Hammam Enneebie, near Beza, in Africa," which states that they burst forth on a small plateau, covered by a white crust of the mineral matter deposited by their water, and they form round each orifice small cones, from the summits of which the water flows. Their average heat is from 79 to 80 degrees of Reaumur, or from 207½ to 212 Fahrenheit—boiling point. It is only 200 or 300 paces from the spot where the waters of these springs join a mountain stream of cold water that their heat becomes reduced enough to allow of people bathing in them; they are highly sulphureous, and send up immense clouds of steam.

"ADJ GOLD."—The celebrated "red gold," which has attracted the attention of travellers in the East, of late, is found extensively in the regions between the Himalaya Mountains and Thibet, where it appears in the shape of a mineral exhibitant from the rock in which it is deposited.

NOTICES TO CORRESPONDENTS.

To Agents and Captains of Mines.—The Editor will feel much indebted to Captains, and other Agents of mines, abroad and at home, by the transmission of specimens of ore, labelled with the local designation of the mineral, and also the mine, with the view of placing them in a collection, now being formed, having for its object the classification of the several minerals of the various districts—attaching thereto such statistical information as can be acquired. Plans, or sections of mines, with particulars as to the direction and underlay of lodes, with notices of cavans, cross cour ei, faults, &c., will be highly acceptable, and will be placed in cases, to which reference may, at any time, be made by the contributors. It is proposed, from time to time, to give papers, treating on particular districts, in the columns of the Journal, with an illustrative plan, or section.

"H. T." is thanked for the promise of a series of geological and mineralogical specimens from the Vale of Ovoca.

"G. C." is reminded of his promise of a series, displaying the strata of the Swansea Valley and the anthracite district.

We believe the report, prepared by the Government Commission, on the Employment of Children in Mines, will be presented to Parliament in the course of a few weeks; until which time we would recommend "R. G." to suspend the publication of the statements he refers to.

We are obliged to "A Constant Reader" for his suggestion; he will, however, see, on reference to the table in another column, that we have introduced much valuable information, that the British miner may see in what way his interests will be affected by the new tariff.

Our correspondents at Liverpool and Devonport have been answered by post.

Mr. D. Sharpe's paper, on the Silurian Rocks and Old Red Sandstone of the South of Westmoreland, shall appear in our next.

The publication of Mr. Phillips's Lectures on Geology will be commenced in our next Number.

West Durham Railway.—We cannot comply with the request of "A Shareholder" (Durham)—the directors do not wish publicity given to their proceedings, consequently they refuse to admit reporters.

Mr. Bodge, on Mine Surveying.—"A Miner," on Pressure engines v. Water wheels—together with communications from Mr. A. T. J. Martin, and several other correspondents, must stand over.

The great space necessarily occupied by our notice of the proposed new tariff, as affects mines and minerals, interferes much with our proposed arrangements. We can only express our regret at not being able to comply with the wishes of several correspondents, by giving insertion to their communications; but, in order to prevent further disappointment to them, and to clear off arrears of valuable miscellaneous papers, which we have from time to time received, we purpose publishing with our next Number an additional sheet.

MEETINGS OF SCIENTIFIC BODIES.

IN THE ENSUING WEEK.

SOCIETY.	PLACE OF MEETING.	DAY.	HOUR.
Royal Asiatic	14, Grafton-street	Saturday	3 P.M.
Statistical	4, St. Martin's place	Monday	8 P.M.
Medical	Bolt-court, Fleet-street	Monday	8 P.M.
Royal Medical and Chir.	53, Berners-street	Tuesday	8½ P.M.
Civil Engineers	25, Great George-street	Tuesday	8 P.M.
Zoological	57, Pall mall	Tuesday	9½ P.M.
Society of Arts	Adelphi	Wednesday	7½ P.M.
Geological	Somerset House	Wednesday	8 P.M.
St. Society of Literature	St. Martin's place	Thursday	4 P.M.
Numismatic Society	Somerset House	Thursday	7 P.M.
Royal Botanical	Regent's park	Saturday	4 P.M.
Westminster Medical	Koster Hall	Saturday	8 P.M.
Mathematical	Crispin-street, Spitalfields	Saturday	8 P.M.

PUBLIC COMPANIES.

MEETINGS.

British Gas Light Company	11, George y.d, Lombard st	March 23	1.
Gt. Wh. Charlotte Mining Assoc.	George and Vulture Tavern	29	1.
Canada Company Company	Canada House	30	1.
Cambrian Iron and Spelter Co.	21, Moorgate-street	31	12-1.
Dukin Steam Navigation Co.	George and Vulture	April 4	12-1.
Great North of England Railway	Northgate, Darlington	5	1-2.
West London Railway	11, Abchurch lane	7	1.
Rocks Tin Mining Company	George and Vulture Tavern	7	1.
Margate Pier and Harbour Co.	Margate	11	11.
Blaenavon Iron and Coal Co.	London Tavern	13	1-2.

CALLS.

Bristol and Gloucester Railway	5l.	March 31	Barnet, Hoare, and Co.
Northern Coal Mining Company	2l.	30	Newcastle Joint-Stock Bank.
Northern and Eastern Railway	4l.	April 2	Masterman and Co.
Hungerford & Lambeth Susp. Br.	2l. 10s.	6	London and County Bank.
Mine Gerace Mining Company	1l.	12	Barclay, Bevan, and Co.
Miners' Company	10l.	13	Glyn and Co., or office.
Irish Waste Land Im. Society	1l.	15	As former calls.
Cambrian Iron & Spelter Co.	3½l.	17	As former calls.

DIVIDENDS.

London and Croydon Railway	6s. 6d. per sh.	As former calls ..... March 31.
Ionian Bank	6 per cent.	17, Basinghall st. ..... April 11.
Bank of Australia	4 per cent.	7, Moorgate street. ..... 11.

REASONS AGAINST THE PROPOSED DUTY ON THE EXPORTATION OF COAL.

—Since the duties payable on the exportation of coal were repealed in the year 1834, a very large tract of coal has been brought into immediate and considerable value to the owners of it (as owners of the soil), by the enterprise of individuals taking it upon lease, engaging to pay certain large annual rents.

With reference to the North of England—we allude more particularly to that part of Northumberland which lies north of Tynemouth and reaches to Alnwick, with a considerable breadth to the westward, and the exploring of coal mines for the purpose of exportation has been equally extensive in the county of Durham, while new harbours, one at Warkworth, in Northumberland, and one at Hartlepool, in Durham, have been made by private funds to form an extended exportation of coal. In these operations positive engagements have been contracted, and large capitals embarked, upon the faith that a duty, which has been so seldom in force, and so oppressive upon the expansive industry of the country, would never be re-enacted.

A very large proportion of the coal exported is conveyed in British vessels, which have thus obtained beneficial employment.

A large capital has also been embarked in promoting the two peculiarly British inventions of steam and gas; a large fleet of steam vessels of the very first quality and high at cost have been brought into existence, facilitating the intercourse of man in all parts of Europe, Asia, and America, and curtailing the risk and time for the transport of merchandise, particularly those descriptions which are intrinsically of high value.

Two English companies alone have embarked a capital of £700,000 in establishing the invention of gas lighting on the continent—an enterprise which, inasmuch as it has been attended with a considerable exportation of English manufactures, as well as English coal, a large and totally new employment for British shipping, and a contribution to this country of the rentals received for the gas light, has added materially to the aggregate profit and occupation of this country, and has, in connection with the exportation of coal for the purposes of steam navigation, formed the basis and support of the new undertakings which have been entered upon in the coal fields of the north of England.

There is no doubt these vast interests, mutually dependent upon each other, will be dreadfully paralysed, if not totally annihilated, by a perseverance in the present imposition of a duty of 4s. per ton on English coal; and one such a duty be defended upon any consideration of the value of the article. The highest price charged for coal exported for gas purposes is 6s. 6d. per ton, while the highest price charged for coal carried to steam purposes is 8s. per ton; such a duty would consequently enhance the cost more than 3rd per cent. upon an average price. The proposed duty would act to a great discouragement to steam navigation, and as a heavy direct tax on the foreign trade of the country carried on by steam communication.

It is conjectured, that, with the exception of Holland and Russia, few, if any, coals are exported for manufacturing uses, but that the bulk consists of such exported for English gas companies, not for the use of Government and private steam vessels; but in that and the principal use of English coal, after the gas works are supplied,* is for private, and not manufacturing, burning; while in Russia, Petersburgh is lighted with gas (but not to an English company), and after that the principal use of coal is to the export reflection; so that next below almost at Russia, in this legislation must easily be met by more stringent legislation, on her part, of duties on articles of English industry. In Holland, moreover, it should be remembered that it is only since the Belgian Revolution that English coal has been admitted to entry otherwise than upon payment of a duty which was prohibitory.

It is impossible not to admit that an amount of duty imposed on the exportation of coal to this country can compensate the expensive substitute of the treatment in the pursuit of manufactures, of steam navigation, and of gas lighting. These signal improvements in the conditions of mankind cannot be arrested in their onward course. Holland has only to retrace her step, as regards Belgium, to liberate herself entirely from the consequences of such mistaken legislation in England. But grave questions evince of coal which, at the present moment, compete already with the English coal; and to Prussia and Germany the Governments have only to impose additional duty on English coal, or by some public assistance of money to give it an interest, in addition to their immunities, which would open out large deposits of coal actually existing and already partially worked, whose inexpensive development would render those countries entirely independent of our supplies, and deprive our collieries and shipping of a profitable employment.

All these great objects are therefore brought into jeopardy for the sake of collecting the revenue, calculated now at £100,000, but which must necessarily decline, the total effect of which may well be a heavy upon commercial enterprise, and an encouragement to the industry of England. It is not that we have any desire to impede the extension of Government, or that we have any wish to escape from any contribution which the necessities of the State require, but the adoption of such an impost as a duty on the exportation of English coals is simply ominous for commerce, and shifting those off the backs of our sisters.

* There are English gas works at Amsterdam, Rotterdam, and Hanover.

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THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, MARCH 19, 1842.

The proposed tariff, or alteration in the duties on foreign produce imported into this country, submitted to Parliament by Sir Robert Peel as a Government measure, has created a sensation throughout the country, unexampled, we may say, for the past half century. It is sufficient for us to confine our attention to the ores, metals, and manufactures of foreign production, on which it is proposed to reduce the import duty, and on the present occasion we shall confine our remarks to tin, copper, and spelter, reserving until a future Number the several other products.

It is manifest that the object of Government is to alter all duties which approach to, or partake of, a prohibitory nature, and to place instead such as will admit of foreign ores, metals, or manufactures, coming into this country—not fairly competing with ours, but holding out those advantages which, as a financial measure, on the part of Government, will bring "grist to the mill," forgetful that, in obtaining a revenue by an import duty on foreign ores and metals, they, at the same time, throw thousands out of employment—they destroy property, by the suspension or abandonment of mines—and they inflict an injury on this country, which owes its prosperity to its production, which can never be repaired. That the tariff has been drawn up by parties ignorant of the subjects on which they had to legislate, cannot be more readily demonstrated than by taking the metals tin and spelter; in the former, as we shall presently prove, the duty on metallic tin is reduced to 10*l.* per ton, on which the British miner would rely in fancied security, while tin ore of 75 per cent. produce is admitted at 1*l.* per ton, or 1*l.* 6*s.* 8*d.* the ton of metallic tin. In spelter the error is more gross, although we are told—but not officially—by way of apology, that it was a mistake; it will be seen that ore valued at 5*l.* or 6*l.* per ton, cake spelter 37*l.*, rolled zinc at 49*l.*, and manufactured articles at 80*l.* to 100*l.* per ton, are all set down at the uniform duty of 1*l.* per ton, thus destroying our home manufacture. Many errors, although not so palpable, are evidenced throughout the tariff, and renders it a matter of regret that Government should not have availed themselves of that information which could have been acquired, and would readily have been afforded, by practical men.

With reference to copper, we have no hesitation in saying, that the question is far from being understood, as to the comparative position of the Cornish and foreign mines, or they would never have adopted the scale of duty which we find inserted in the tariff. In the first place, we would ask whether the distinction between *ore* and *regulus* is understood, for, to those conversant with mining, it is well known that the Chili ores, as they are designated in the Ticketing Paper, and so adopted by Government, come over here in the shape of regulus, or semi-metal, and yet they are to be subjected only to the duty imposed on *ore*—that of 5 per cent. It may be said, that, as it is *ad valorem*, no matter what the produce—but here we are at issue with Government—the object, say Government, is to protect our *manufactures* (not *mines*, be it observed), and, by allowing foreign ores to come into this country to be smelted for exportation, or consumption, we put forward a measure which must have the effect of encouraging and upholding the smelting and manufacturing interest—while they forget that, while *ores* average, say, 22 per cent., the *regulus* comes in at 60 to 65 per cent. produce, and thus anticipates, by labour abroad, the advantages which Sir R. Peel would contemplate deriving from such *ores* being smelted in this country. The result may be readily foreseed—nine-tenths of the mines in Cornwall, and other districts, will be abandoned, and, consequently, the like proportion of the population of that county be thrown out of employment. Government may depend upon it, that, however strongly they may support and uphold the Whig Poor Law, they will meet with so strong an opposition in the West from the landholders and lords of mines, who, like the miners, will adopt the Cornish motto, and unite "one and all," that it will be a fearful day, when thousands, and tens of thousands, are thrown out of employ, and have no resource but that of application to the "Union."

We may instance the returns from some of the principal mines in Cornwall as illustrative of our position, as to the consequences which must attend any reduction in the price of copper, or, rather to use a term more immediately associated with mining, "the standard." The Consolidated Mines, we believe, made a dividend for the past two months of 1500*l.*, although the actual profits did not amount to more than 1200*l.* with ores selling at a standard of 125. Now, assuming ores of 8 produce at a standard of 125, it would give 7*l.* 5*s.* per ton; but, if a drop of 15 takes place, we should find that ores of the same produce, at the standard of 110, would only return 6*l.* 1*s.* per ton, or a difference of 24*s.* per ton. To those unacquainted with mines it would appear somewhat strange, that a mere drop, or falling off in the standard of 15 in 125, should cause a depression in the price of ore of one seventh; but such is the case; the consequence of which would be, that on the produce of the Consolidated Mines—say 1000 tons per month—the difference would be 1200*l.*, which would leave a loss of 600*l.* per month instead of the profit cited. So many facts and arguments press upon us in the consideration of the question, that we hardly know which first to take, but, as the subject must be one of continued attention, we proceed to those points which at the moment more readily present themselves to our notice.

If then, the Consolidated Mines are thus placed by a decline in the standard, what are we to say to the Tresavean, Carn Brea, Fowey Consols, Levant, and other copper mines? or to Wheal Vor, Charlestown, Great Work, and other tin mines? Is it to be expected that they can stand, if foreign ores be imported for home consumption without a fair protective duty being given to the English miner? As regards the poor mines, they must go as a matter of course, and this must have been contemplated by Mr. M'Gregor, or whoever cut up the tariff, if he possessed an iota of knowledge on the subject on which he submitted measures for Parliament to legislate. In the Consolidated Mines no less than 600*l.* is expended monthly; Tresavean, say 400*l.*; Carn Brea, 400*l.*; Fowey Consols, 600*l.*—thus, in these four mines alone, employing not less than 6000 individuals, upwards of 240,000*l.* is expended annually, of which 30,000*l.* may be said to go for materials, castings, iron, coal, timber, ropes, and powder, forming the principal items, the residue being expended in labour. We shall next week lay before our readers the exact data, with other details, having merely charged the memory with the preceding figures.

As a further illustration, were such necessary for our object, to prove the injustice done to the home miner, or to render more clear the relative positions of foreign and British mines, we avail ourselves of a private letter received within the past few days, dated Cuba, late in January, in which we are informed that the quantity of ore raised by six men in a fortnight was 160 tons, of a produce of 32 per cent.—being equal to 320 tons per month. If we compare the working a mine in the county Cornwall with this return, we shall find that the quantity of ore required to be raised (taking the average produce of the country at 8), so as to realise an equal amount in money for metallic copper contained therein, would be 1280 tons—a return equal to the produce of the Consolidated Mines, by which employment is afforded to at least from 1200 to 1300 individuals—a very striking contrast it must be admitted.

It is proposed that foreign copper ore should be henceforth imported at 5 per cent.—or, say, on Cuba ore (of 20 per cent. produce) 15*s.* per ton—instead of the ore being smelted in bond, and shipped to foreign markets. Now, it is quite clear, the effect of this alteration will be, that copper in foreign markets will go up—copper at home will go down—Government will obtain its 5 per cent. on all foreign ore, or, on the imports of last year, in round numbers, at the rate of 35,000*l.* per annum—and our home mines will be sacrificed. Admitting the new tariff to come into force, foreign copper could, with equal advantage to the foreign miner, be sold here at 5*l.* 15*s.* per ton less than that obtained for the produce of our Cornish mines, or, even say 5*l.*, would be equal to a reduction of 8*s.* per ton on every ton of ore of the average produce of 8; and, again, referring to the Consolidated Mines, the difference on the returns of 1000 tons per month would at once reduce the value of the ores raised 400*l.* per month, or about 5000*l.* per annum.

There is another question, however, with reference to copper ore, of which the Government and their advisers (if any) seem to have lost sight—it is that of the impracticability of smelting foreign ores without the admixture of those produced in this country, while the fact is notorious, that the ores of our home mines can be smelted without the aid of foreign ores. What would be done with ores and regulus, ranging from 30 to 60 per cent., were it not that the poor ores were mixed, as we believe that invariably the ore necessary for the manufacture of one ton of cake copper is 9 to 10 tons, the process of smelting not having arrived at that perfection, which will admit of ore of greater produce being smelted alone. This fact, in itself, should be sufficient for our home mines to contest the proposed alteration in duty, as the foreign miner is not only indebted to us for the coal with which to smelt his ore, but a mixture of a poorer class, whereby he can reduce it into cake copper of a commercial value.

Having, for our present purpose, sufficiently discussed the question of copper, and which will be found hereafter treated upon more in detail, we proceed to the consideration of tin. In this article, as regards white (or block) tin, the duty is reduced from 15*l.* to 10*l.*—a reduction which, although not affording sufficient protection to the English miner, we will pass over, to arrive at one of those egregious errors committed in the arrangement of the proposed tariff.

It will be seen that the duty on foreign tin ore, which was fixed at 10*l.* per ton, is now reduced to 1*l.*, so that the proposed duty is a mere farce, if looked upon in any other light than a boon to the manufacturers and consumers. In spelter, the ore, metal, and manufactured goods are all placed at one duty, that on metal being reduced 50 per cent.—a reduction perfectly uncalled for, and which, from the state of the spelter market, we have no hesitation in saying, will not diminish the price of the article to the consumer, while it gives 1*l.* per ton profit to the foreign miner.

We now approach the metals tin, copper, and spelter, which we shall take *seriatim*.

TIN.

Present duty	15*s.* per cwt., or	15*l.*	per ton
Proposed duty	10*s.* ,,	10*l.*	,,
Reduction	5*s.* ,,	5*l.*	,,

Confining the question to the import of tin alone, the reduced duty may be said to resolve itself into the consideration, whether it affords a sufficient protection to the home miner—

The present price of tin we will assume at	£72	0	0	per ton
The import duty added thereto, of	10	0	0	,,
Will give	£82	0	0	,,

at which price it can now only compete with British tin, at the present market prices, and, in fact, affording to such extent a protective duty—that is, assuming that the cost of extraction, carriage, freight, and all other expenses, are the same abroad as those in England. On the other hand, assuming that foreign tin can be raised, shipped, and imported into this country at 50*l.* per ton, the addition of 10*l.* per ton duty, gives a price which would be remunerative to the foreign miners less than that obtained for the produce of our home mines of 12*l.* per ton. We need hardly repeat, that, in this, as in other cases, the figures are nominal, the object being to illustrate the position of our home and foreign mines. The greater importance to be attached to the reduction of duty, in the introduction of foreign tin into our market, appears to us, however, to be with regard to the duty imposed, or, rather, proposed, on tin ore, in which an error, equally eggregious as that affecting spelter (only in an opposite direction), has been fallen into. We will, therefore, proceed to

TIN ORE.

The present duty is	10*s.* per cwt., or	10*l.*	per ton
The proposed duty	1*s.* ,,	1*l.*	,,
Reduction	9*s.* ,,	9*l.*	,,

As foreign (black tin, or) tin ore produces 70 to 75 per cent. of metal, it follows that one and one-third ton of ore is equal to one ton of metallic tin—the duty on the ore required for the manufacture of which,

At the present rate, is	£13	6	8	per ton of metal
By the proposed reduction the duty is	1	6	8	per ton
Or difference of	£12	0	0	per ton

in favour of foreign tin ore being imported, in preference to metallic tin, under the proposed tariff. Comparing, then,

TIN, AND TIN ORE,

We find that the former (foreign) is reduced	5*l.* per ton
And the latter (1¼ equal to one ton metallic tin)	12*l.* ,,

—thus raising the question, whether it is for the interest of the foreign miner to import his produce into this country in the shape of *ore* or *black tin*, it being evident that a bonus of 8*l.* 13*s.* 4*d.* per ton on the metallic tin is held out to him by the transportation of ore, instead of reducing it abroad. In arriving at this conclusion, we assume that tin can be manufactured in this country equally as cheap as in the Straits. The duty, under such circumstances, it will be seen, is—

Foreign black, or manufactured, tin	£10	0	0	per ton
1¼ ton ore (equal to 1 ton metallic tin), at 20*s.*	1	6	8	,,
Or, a difference in favour of importing *ore* of	£8	13	4	,,

—thus showing, if the premises be correct, that the British miner will have to contend with foreign *ore* rather than foreign *tin*, and that the only protecting duty for the home miner, if foreign and British *ore* have to compete, is 1*l.* 6*s.* 8*d.* per ton on white tin, or less than 2 per cent. There is another view which may be taken, and which it is only right to notice—

Suppose 1¼ ton tin ore imported, at duty of 20*s.* per ton	£1	6	8
Add thereto freight, at 25*s.* per ton	1	13	4
Gives the cost of freight and duty on 1 ton metallic tin	£3	0	0

If, again, we take—

1 ton metallic tin—import duty	£10	0	0	
To which add freight	1	5	0	—11 5 0
We shall still find a difference in favour of the importation of tin ore of—per ton				£8 5 0

Such is the result of figures, while the question remains to be solved whether foreign ore, under all the advantages, can be imported into this country—a question which will, doubtless, be well canvassed by those interested in our home mines.

COPPER.

The position assumed by those interested in the importation of foreign ores, including the smelter and manufacturer, is that, under the present system, the duty being prohibitory, all foreign copper ores are smelted in bond, and the copper, or metallic produce, being exported to foreign markets, excludes the produce of our home mines—hence the differences existing under the present system in the price in foreign markets of copper smelted in

his country from foreign ores, and the price obtained at home for copper produced from English ores, to which the consumption of this country is confined. For instance,

The present price at Rouen of foreign copper smelted in this country is	£88	0	0	per ton
That of English copper in Great Britain	96	0	0	,,
Showing a difference of	8	0	0	,,

in favour of the foreign manufacturer. The consequence of the import duty proposed on foreign copper ores would, therefore, prejudice the foreign miner, inasmuch that, now smelting in bond, and selling at 88*l.*, he could not (so as to secure the same advantages as the present price affords him) sell at less than 92*l.*, if that the import duty on the ores, as assumed, amounted to 4*l.* per ton on the metal (or, say, 15*s.* per ton on ores of the produce of 20 per cent.), so that the English manufacturer can compete with the foreign copper ore in distant markets.

COPPER, PIGS OR UNWROUGHT.

The present duty is	£27	0	0	per ton
The proposed duty	10	0	0	,,
Reduction	17	0	0	,,

On the reduction here made, or the probable effect which may result therefrom, we defer making any comment.

MANUFACTURES OF COPPER.

A reduction is here proposed to take place of 50 per cent., or to reduce the present duty of 30 per cent. *ad valorem* to 15 per cent.

Having entertained the view taken by those interested in the import of foreign ores, and adduced the arguments in favour of the measure, it becomes necessary to consider what effect the alteration in duty will have on the produce of our own mines, as well as on our home markets; and, adhering to the figures already quoted, we will again take the price of copper at Rouen at 88*l.*, while that in England is 96*l.*—making a difference of 8*l.* per ton. As has been already shown, the foreign copper (for such we will designate that produced from foreign ores) must rise in that market 4*l.* per ton to cover the proposed import duty—making it 92*l.*—so as to afford a price equivalent to that now obtained by the foreign miner. Now, there is no particular reason why a further advance should take place in foreign markets—while any competition on the part of the proprietors of English mines and the smelters of British copper would only tend to a reduction—it being evident that, at the present moment (supposing the new tariff to come into action), British copper could only be exported at reduced rates, without a rise should take place of 8*l.* per ton in the foreign markets, exclusive of the freight, so as to equalise the price with that now obtained in this country. If, for instance, we assume an advance of 6*l.* per ton on the present price at Rouen, this would give the smelter of foreign ores 2*l.* per ton profit, or advantage, after paying the import duty—while, for English copper, to meet it in the foreign market, a sacrifice, or loss, of 2*l.* per ton would be incurred, in addition to the freight. It is, therefore, quite manifest that, although other markets may be thrown open to us, it is only with the prospect of lower prices, whereas, on the other hand, the new tariff opens to foreign ores a market in England, at prices full 5*l.* per ton above that which is now realised by the exportation abroad, or, in other words, 1*l.* per ton on the ore yielding 20 per cent.—in such estimate allowance being made for the payment of the import duty of 4*l.* per ton, and taking into consideration the freight and charges on export to Rouen. If our figures be correct—and we believe them to be sufficiently so on which to base an argument—it will be seen that English ores, of average produce of 8, are prejudiced to the extent of 8*s.* per ton, in having to compete with foreign ores, while the advantages possessed by the latter, from their richness, more than compensate for the heavy land carriage and freight to which they are subjected.

The returns from Cuba and Chili, for the past six months, compared with the produce of our home mines, will, on comparison with former calculations of this nature which have appeared in our columns, afford demonstrative evidence of the rapid increase of foreign ores, the return of our home mines remaining steady. On referring to the sales by ticketing, at Swansea, of foreign ores, for the six months ending 31st of December, 1841, it will be seen that the quantity of ore imported was 20,630 tons, yielding 358,333*l.* 4*s.* 6*d.*—the returns from Cornwall for the like period giving 81,028 tons, or 520,201*l.* 6*s.*

SPELTER.

The present duty is 2*l.* per ton on cakes, and 10*l.* per ton "not in cakes," which latter embraces sheet zinc and manufactured articles. The present duty on *lapis calaminaris*, or carbonate of zinc (the foreign ore), is 20*s.* per ton; on zinc in cakes (the crude product), 40*s.* per ton; on spelter in sheets, and all manufactured articles, which come under the designation of, "not in cakes," 10*l.* per ton. By the reformed tariff, as proposed, these various duties are levelled to one uniform duty of 20*s.* per ton—that is, on the ore imported—the zinc in cakes, or crude state—the spelter in sheets—and the manufactured articles. It must be quite clear that this is against the principle of the proposed tariff on all other foreign metals, the taxation being for the supply of a cheap raw material, and the protection of native labour. The impolicy of heavily taxing the foreign article in the raw material is evident, and, as considerable capital has been embarked in mills and machinery in this country, for reducing spelter into zinc, and subsequently rolling it into sheets, it would be dealing unfairly by labour and capital invested, to permit the import of the sheet, or manufactured commodity, on the same terms as the ore, or raw material. In France, where the duty on the crude zinc is only at the rate of 10*d.* per ton, the manufacturers would be able, were this tariff, as proposed, to import into this country spelter in sheets, and thus destroy our home manufacture. We will suppose, for a moment, that the Lords Commissioners of the Board of Trade had placed before them—

1. Calamine (*lapis calaminaris*) or zinc ore	market value	5*l.*
2. Crude spelter (in cakes)	,,	37*l.*
3. Sheet (or rolled) spelter	,,	49*l.*
4. Manufactured zinc (watering pots, chimney-pots, pipes, &c.)	,,	80*l.* to 100*l.*

These articles, whether as raw ore—crude spelter—metallic sheets—or as zinc manufactures, are, by the proposed tariff, admitted at the same duty of 1*l.* per ton—an error which can only be attributed to want of information in the compilation of the tables submitted by Government. In considering this question, we may observe, that while France admits the same raw material at a duty of 10*d.* per ton, they charge 20*l.* per ton on all zinc manufactures imported—thus proving that, while they are ready to introduce foreign materials, they take care to secure to themselves the advantages attendant on the manufacture.

As space, however, will not admit of a notice of the several articles in one Number, and having treated pretty fully on three of the principal metals, or ores, proposed to be introduced, we defer further observations until next week, in the meantime courting the co-operation of the mining interest.

Since the promulgation of the tariff, we have been actively engaged in directing the attention of those interested in mines to the main features which it presents, and it will be satisfactory to the miner and mine adventurer, to learn, that a committee has been formed in London, for watching over, and protecting, the British mining interest, who are now actively engaged in collecting statistical information and facts, with the view of submitting them at a general meeting, contemplated to be held immediately after the Easter recess; in the meantime, our friends in Cornwall are not idle, as we find, from a letter received by this morning's post, that a general meeting of the mining interest is convened for the 30th instant, to be held at Andrews's Hotel, Redruth.

THE NEW TARIFF—ORES, MINERALS, AND METALS.

A TABLE, showing the Present Duty imposed on all Foreign and British Ores, Minerals, and Metals, imported into Great Britain, with the amount of Duties received in 1840, together with the several proposed Reductions, and the Duty to be fixed in lieu thereof, with Calculations on the Reductions so made:—

PRESENT DUTY ON ORES AND METALS. FOREIGN AND BRITISH. Amt. of duty rec. in 1840	Description of Article.	Per	Present duty.	PROPOSED REDUCTION. FOREIGN. Dec. per cwt.	Dec. per ton.	Dec. per cent.	BRITISH. Dec. per cwt.	Dec. per ton.	Dec. per cent.	PROPOSED DUTY. FOR. Rate of duty.	BRIT. Rate of duty.	Per	FOREIGN & BRITISH. Description of Article.
£ s. d.			£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.		£ s. d.	£ s. d.		
32 6	Antimony ore	ton.	0 1	Nil.	Nil.	Nil.	Nil.	0 0	75	0 1 0	0 0	ton.	Antimony ore.
Nil.	— Crude	cwt.	0 0	0 5	5 0	62	0 7	3 7	91	0 3 0	0 0	cwt.	— Crude.
0 14 4	— Regulus	do.	0 16	0 13	13 0	81	0 15	15 5	95	0 1 0	0 0	do.	— Regulus.
151 0 0	Arsenic	do.	0 8	0 7	7 0	88	0 7	7 10	94	0 1 0	0 0	do.	Arsenic.
1,556 0 0	Brass, Manufactures of	—	10 p. ct	....	....	50	....	....	92	15 p. ct.	7½ p. ct.	—	Brass manufactures.
Nil.	— Powder of	lb.	0 2	s. p. lb.	....	80	½d. p. lb.	....	99	0 0 ½	0 0 ¼	lb.	— Powder of.
11,179 0 0	Brimstone	cwt	0 0 6	Nil.	Nil.	Nil.	0 0 3	0 3 0	50	0 0 6	0 0 3	cwt.	Brimstone.
0 0 1	— Refined, in rolls	do.	0 0 9	0 4 0	4 0 0	68	0 5 0	5 0 0	93	0 2 0	0 1 0	do.	— Refined in rolls.
0 1 1	— in flour	do.	0 0 9	0 7 0	7 10 0	80	0 8 0	8 15 0	90	0 2 0	0 1 0	do.	— in flour.
332 0 0	Bronze Manufactures—works of art	do.	1 0 0	Nil.	Nil.	Nil.	0 10 0	10 0 0	50	1 0 0	0 10 0	do.	Bronze works of art.
91 9 5	— other manufactures	—	10 p. ct	....	....	50	....	....	75	15 p. ct.	7½ p. ct.	—	— other manufactures
97 0 0	— Powder of	—	15 p. ct	....	....	40	....	....	70	15 p. ct.	7½ p. ct.	—	— Powder of.
81 9 5	— other manufactures of	—	30 p. ct.	....	....	50	....	....	75	15 p. ct.	7½ p. ct.	—	— other manufactures
Nil.	Bullion and foreign coin, and ores of gold or silver, or of which the major part in value is gold or silver	—	Free.	....	....	..	....	....	..	Free.	Free.	—	Bullion, &c.
48 7 4	Buttons	—	20 p. ct.	....	....	25	....	....	62	15 p. ct.	7½ p. ct.	—	Buttons.
11 7 3	Coals, culm, and cinders	ton	7 0	....	1 19	27	....	1 19	89	0 1 0	0 0	ton.	Coal, culm, &c.
4 9 8	Copper ore—the produce of, and imported from, British possessions	cwt	0 1	....	....	.	....	....	..	....	1 p. ct	cwt	Copper ore, British pos.
16 11 2	— otherwise imported	do.	0 12	....	....	..	....	....	.	3 p. ct.	....	do.	— otherwise imported
140 0 0	— containing not more than 20 parts for every 2 per cent., 2d. per cwt.												
5 5 0	— old, fitonly to be remanufactured	do.	0 15	0 7 6	7 10 0	50	0 11 6	11 10	78	0 7 6	0 5	do.	— old, &c.
3 7 9	— in plates and coin	do.	1 10	1 0	0 0	66	1 5	0 5	83	0 10	0 5	do.	— plates and coin.
1 3 7	— unwrought—viz., in bricks or pigs, rose copper, & cast copper	do.	1 7	0 17	7 0	63	1 2	0 2	81	0 10	0 5	do.	— unwrought.
663 0 0	— in part wrought—viz., bars, rods, ingots, hammered or raised	do.	1 15	1 5	5 0	71	1 10	0 0	86	0 10	0 5	do.	— part wrought.
Nil.	— manufactures not enumerated, and copper plates engraved	—	30 p. ct.	....	....	50	....	....	90	15 p. ct.	3 p. ct.	—	— manuf. not enum.
4 9 8	— the produce of, and imported from, any British possession within the limits of the East India Company's charter, viz.—	—	10 p. ct	....	....	50	....	....	90	15 p. ct.	3 p. ct.	—	— manuf. not enum.
Nil.	Ore*	cwt.	0 1	....	....	..	....	....	..	....	3 p. ct.	cwt.	— produce E. I. C. C.
Nil.	— old, fit only to be remanufactd.*	do.	0 0	....	....	..	....	....	.	15 p. ct.	7½ p. ct	do.	— old, &c.
Nil.	— in plates and coin*	do.	0 15	....	....	..	....	....	..	....	3 p. ct	do.	— plates and coin.
0 1 3	— unwrought, bricks or pigs, rose copper, and cast copper*	do.	0 9	....	....	..	....	....	..	....	3 p. ct.	do.	— unwrought.
Nil.	— in part wrought, bars, rods, or ingots, hammered or raised*	do.	1 11	....	....	..	....	....	..	....	3 p. ct	do.	— part wrought.
Nil.	— manufactures not enumerated, and copper plates engraved	—	30 p. ct.	....	....	..	....	....	..	....	3 p. ct	—	— manuf. not enum.
Nil.	Copperas, Blue	cwt.	0 5	0 4	4 0	80	0 4	4 10	90	0 1 0	0 0	cwt	Copperas, Blue.
Nil.	— Green	do.	0 3	0 4	4 0	80	0 4	4 10	90	0 1 0	0 0	do.	— Green.
744 0 0	— White	do.	0 12	0 9	9 10	80	0 10	0 13	90	0 2 0	0 1	do.	— White.
Nil.	Gold leaves, per 100	—	0 3	....	....	Nil.	....	....	50	0 3 0	0 1	—	Gold leaves, per 100.
3 0 0	Iron ore	ton	0 5	0 0 7	0 3	40	0 0 3	0 4	10	0 2 0	0 0	ton.	Iron ore.
35 10 9	— Pig	do.	0 10	0 0 7	0 5	50	0 0 5	0 8	87	0 5 0	0 1	do.	— pig.
54 8 0	— from British possessions	do.	0 1	....	....	Nil.	....	....	Nil.	....	0 1	do.	— British possessions
30,855 0 0	— Bars unwrought	do.	1 10	....	0 10	58	....	1 7	93	1 0 0	0 2	do.	— bars unwrought.
Nil.	— from British possessions	do.	0 2	....	....	..	....	....	Nil.	....	0 2	do.	— British possessions
360 0 0	— and steel wrought, not otherwise enumerated	—	20 p. ct.	....	....	25	....	....	62	15 p. ct.	7½ p. ct.	—	— and steel wrought
7 1 6	— Wire of steel*	lb	0 1 10	....	....	..	....	....	..	15 p. ct.	7½ p. ct.	lbs	— wire of steel.
1 10 9	— ditto of iron*	do.	0 0 4	....	....	..	....	....	..	15 p. ct.	7½ p. ct.	do.	— of iron.
175 0 0	— Blooms	ton	0 15	....	....	33	....	0 12	84	0 10	0 2	ton	— blooms.
238 0 0	— Chromate of	cwt	0 5	....	....	Nil.	....	0 2	50	0 3 0	0 2	do.	— Chromate of.
1 5 7	— Slit or hammered into rods	cwt	0 5	0 5 0	3 10	70	0 4 5	4 5	85	0 1 0	0 0	cwt	— Slit or hammered.
10 12 4	— Cast*	—	10 p. ct.	....	....	..	....	....	..	0 1 6	0 0	do.	— Cast.
Nil.	— Hoops	cwt	1 8	....	....	94	....	....	97	0 1 6	0 0	do.	— Hoops.
Nil.	Lapis calaminaris	do.	0 1	....	....	Nil.	0 0 6	0 10	50	0 1 0	0 0	do.	Lapis calaminaris.
Nil.	Latten	do.	0 4	0 3	3 0	75	0 3 6	3 10	92	0 1 0	0 0	do.	Latten.
0 0 7	— Shaven	do.	0 6	0 5	5 0	84	0 5 6	5 10	92	0 1 0	0 0	do.	— Shaven.
0 11 10	Lead, Ore—	ton	1 5	0 0	0 15	60	0 1 0	1 0	97	0 10	0 2	ton	Lead ore.
3,624 0 0	— Black	cwt	0 4	0 3	3 0	75	0 3 6	3 10	88	0 1 0	0 0	cwt	— Black.
1 0 2	— Pig	ton	2 0	0 1	1 0	50	0 1 0	1 10	75	1 0 0	0 10	ton	— Pig.
Nil.	— Red	cwt	0 6	0 4	4 10	75	0 5 6	5 5	92	0 1 0	0 0	cwt	— Red.
177 0 0	— White	do.	0 7	0 5	5 10	78	0 6 3	6 5	89	0 1 0	0 0	do.	— White.
Nil.	— Chromate of	do.	11 4	10 19	10 0	98	11 1 0	11 10	99	0 1 0	0 0	do.	— Chromate.
Nil.	Litharge, gold or silver	do.	0 2	0 1	1 0	50	0 0 6	0 10	75	0 1 0	0 0	do.	Litharge, gold or silver.
401 0 0	Manganese ore	ton.	0 10	0 9	9 0	90	0 9 6	9 10	95	0 1 0	0 0	6ton	Manganese ore.
Nil.	Medals, gold or silver	—	Free.	Nil.	Nil.	Nil.	Nil.	Nil.	..	Free.	Free.	—	Medals, gold or silver.
1 8 0	— of any other sort	—	5 p. ct	....	....	..	....	....	..	5 p. ct	5 p. ct	—	— other sorts.
Nil.	Mercury, prepared	—	10 p. ct	....	....	60	....	....	85	10 p. ct	5 p. ct	—	Mercury, Prepared.
3 0 0	Metal—viz., bell metal	cwt	1 0	0 10	0 0	90	0 10	0 0	95	0 2 0	0 1	cwt.	Metal, Bell.
850 0 0	— Leaf (except gold) per 250 leaves	—	0 6	....	....	66	....	....	83	0 0 1	0 0	¼c	— Leaf, except gold.
0 9 3	Minerals not enumerated	—	10 p. ct.	....	....	75	....	....	93	1 p. ct.	1 p. ct.	—	Minerals not enumera'd
Nil.	— Specimens of minerals, &c., not exceeding 14 lbs. each specimen	—	Free.	....	....	..	....	....	..	Free.	Free.	—	— Specimens.
6 3 0	— ditto exceeding 14 lbs. in weight	—	5 p. ct.	....	....	..	....	....	80	5 p. ct.	1 p. ct.	—	— exceeding 14 lbs.
Nil.	— illustrative of natural history	—	Free.	....	....	..	....	....	..	Free.	Free.	—	— Natural History.
71 1 4	Nickel ore, &c.	—	5 p. ct	....	....	80	....	....	95	1 p. ct.	1 p. ct.	—	Nickel ore.
129 0 0	— Metallic and oxide of, refined	—	20 p. ct	....	....	50	....	....	75	10 p. ct.	5 p. ct.	—	— Metallic & oxide of
21 18 1	Ore not enumerated	—	5 p. ct	....	....	Nil.	....	....	50	1 p. ct.	1 p. ct.	—	— ore not enumerated.
14 1 1	Orcedew	cwt.	2 16	1 6	0 0	46	1 11	11 0	91	1 10	0 5	cwt	Orcedew.
0 0 11	Pewter, Manufactures of	—	20 p. ct	....	....	..	....	....	75	15 p. ct.	7½ p. ct.	—	Pewter manufactures.
4 5 9	Plaster of Paris	cwt	0 1	....	....	..	....	....	Nil.	0 0 6	0 0 ¼	cwt.	Plaster of Paris.
Nil.	Plate of gold* †	—	3 16	....	....	..	....	....	..	3 p. ct.	1½ p. ct	—	Plate of gold.
43 0 0	— Silver gilt* †	do.	0 6	....	....	..	....	....	..	3 p. ct.	1½ p. ct	—	— silver gilt.
99 0 0	— ditto part gilt* †	do.	0 6	....	....	..	....	....	..	3 p. ct.	1½ p. ct	—	— part gilt.
97 9 0	— ditto not gilt* †	do.	0 4	....	....	..	....	....	..	0 p. ct.	½ p. ct	—	— not gilt.
Nil	— old, not battered, of gold* †	do.	1 0	....	....	..	....	....	..	3 p. ct.	1½ p. ct	—	— old, not batt., gold
585 0 0	— of silver* †	do.	0 2	....	....	..	....	....	..	3 p. ct.	1½ p. ct	—	— silver.
4 18 7	Platina and ore	—	1 p. ct	....	....	50	....	....	75	3 p. ct.	1 p. ct.	—	Platina ore.
Nil.	Quicksilver	lb.	0 0	....	....	..	0 4 0	4 15	50	0 0 1	0 0	lb.	Quicksilver.
1,422 0 0	Spelter or zinc, not in cakes	cwt	0 10	0 9	9 0	90	0 9 6	9 10	95	0 1 0	0 0	cwt	Spelter, &c., not cakes.
9,033 0 0	— in cakes	do.	0 2	0 1	1 0	50	0 1 6	1 10	83	0 1 0	0 0	do.	— in cakes.
Nil.	Steel unwrought, British possessions	ton.	0 1	....	....	..	....	....	..	10 p. ct	5 p. ct	—	Steel unwrought.
1 0 1	— Manufactures, not enumerated	—	30 p. ct.	....	....	25	....	....	62	15 p. ct.	5 p. ct	—	— manuf. not enum.
161 0 0	Tale	lb.	0 0 1	5 3	5 6	87	3 1s	0 20	94	0 0 ½	0 0 ¼	lb.	Tale.
Nil.	Tin	cwt.	0 15	0 3	5 0	80	....	....	..	0 10	....	cwt.	Tin.
Nil.	— Ore of	ton	10 0	0 9	9 0	90	....	....	90	1 0 0	0 4	0ton	— Ore of.
2 9 10	— Manufactures, not enumerated	—	20 p. ct	....	....	25	....	....	62	15 p. ct.	7½ p. ct.	—	— manuf. not enum.
19 2 1	— Foil	—	15 p. ct	....	....	40	....	....	70	15 p. ct.	7½ p. ct.	—	— Foil.
77 11 5	Wire, brass or copper	—	15 p. ct.	....	....	40	....	....	70	15 p. ct.	7½ p. ct.	—	Wire, brass or copper.
235 0 0	— Gilt or plated	—	15 p. ct.	....	....	40	....	....	70	10 p. ct.	7½ p. ct.	—	— Gilt or plated.
Nil.	— Latten	cwt.	1 0	....	....	.	....	....	.	15 p. ct.	7½ p. ct.	—	— Latten.
Nil.	— Silver	—	15 p. ct.	....	....	40	....	....	70	15 p. ct.	7½ p. ct.	—	— Silver.

* The decrease cannot be shown from the alterations in duty from per cwt., or ton, to per cent., and vice versâ. † Plus the Excise duty on the proposed tariff.

PRODUCE OF ENGLISH AND FOREIGN MINES.

CORNWALL.

	Tons.	Aver. price.	Amount.
Three years ending June, 1841	904,137	£6 4 0	£5,143,000 9 0

FOREIGN.

	Tons.	Aver. price.	Amount.
Three years ending June, 1841	100,869	£6 4 0	£1,245,700 †

Produce of Sales for Six Months ending 31st December, 1841:—

ENGLISH ORES SOLD IN CORNWALL.

1841.	Tons.	Av. price.	Standard.	Produce.	Fine cop.	Amt. money.
July 1	4959	£6 0 0	£100 15 0	7	697l. 12cwt.	£37,899 0 0
" 6	9596	7 5 0	103 9 0	6½	613 15	19,100 16 6
" 22	3634	6 15 0	102 10 0	7½	260 5	19,961 11 0
" 29	8709	5 16 6	102 11 0	7	960 5	21,955 6 6
Aug. 5	9197	5 10 0	101 16 0	7½	921 15	19,589 14 6
" 12	3969	6 0 0	101 8 0	7½	296 15	19,994 0 0
" 19	1404	6 3 0	111 19 0	9½	140 6	12,176 6 6
" 26	3955	5 17 0	100 9 0	6½	251 11	16,601 19 0
Sept. 2	4805	5 15 0	102 6 0	6½	302 15	20,599 15 0
" 9	5481	5 17 6	105 1 0	7½	391 16	18,867 18 0
" 23	2160	6 11 6	101 3 0	7½	290 18	20,411 15 6
" 30	3751	6 0 0	109 19 0	6½	239 1	22,500 0 0
Oct. 7	4999	6 10 6	104 1 0	7½	317 19	18,849 16 6
" 14	2116	6 10 6	107 19 0	7½	134 19	14,006 3 6
" 21	3410	7 14 6	109 6 0	6½	221 7	24,551 3 6
" 28	5662	6 9 9	106 18 0	7½	427 18	15,779 15 0
Nov. 4	6018	6 6 6	106 5 0	7½	394 5	26,516 9 0
" 11	1788	5 16 6	100 12 0	6½	115 6	10,574 0 0
" 18	3894	7 9 0	102 9 0	7½	288 6	14,479 2 6
" 25	5673	6 4 0	100 0 0	6½	370 5	24,600 10 0
Dec. 2	2355	5 16 0	100 3 0	6½	150 3	15,456 7 0
" 9	2925	6 11 6	104 9 0	7½	220 0	15,605 11 0
" 30	7156	6 10 6	104 15 0	7½	489 8	13,556 3 0
" 30	3733	6 0 0	102 0 0	6½	240 15	25,208 18 0
	80,894	£6 0 0			5015 2	£401,557 0 0

MINERS' COMPANY.

	Tons.	Produce.	Av. price.	
Quarter ending Sept. 30	6487	7	297 0 0	£10,395 0 0
Six returns to Dec. 31—estimated	6487	7	0 0 0	10,395 0 0
				£120,385 0 0

FOREIGN ORES SOLD AT SWANSEA.

1841.		Tons.	Money.	Total tons.	Total money.
June 30	Cuba ores	1001	£23,077 5 6		
"	Chili "	946	11,556 7 6		
				1947	£35,887 9 0
July 14	Cuba "	960	22,407 11 0		
"	Chili "	876	11,574 10 0		
				1836	34,982 2 0
" 28	Cuba "	1567	35,932 15 0		
"	Chili "	600	10,014 9 6		
				2167	45,911 13 0
Aug. 11	Chili "			911	16,793 6 0
" 25	Cuba "	994	24,101 7 0		
"	Chili "	136	3,093 6 0		
				1130	25,205 13 0
Sept. 8	Cuba "	1572	35,931 14 6		
"	Chili "	847	6,319 1 0		
				1919	37,250 15 6
" 22	Cuba "	800	14,702 0 0		
"	Chili "	480	11,240 0 0		
				1280	25,942 0 0
Oct. 6	Cuba "	1203	26,240 16 6		
"	Chili "	680	7,170 4 6		
				1883	33,411 1 0
" 20	Cuba "	1461	27,667 1 0		
"	Chili "	305	7,117 16 6		
				1766	34,784 17 6
" 27	Cuba "	1867	34,879 10 0		
"	Chili "	132	3,119 4 0		
				1999	37,998 14 0
Nov. 10	Cuba "	1611	30,401 13 0		
"	Chili "	927	6,979 4 0		
				2538	37,380 17 0
Dec. 1	Cuba "	754	15,599 17 0		
"	Chili "	260	6,603 17 6		
				1014	22,203 14 6
" 4	Cuba "			906	16,845 7 6
" 29	Cuba "	1917	39,879 7 6		
"	Chili "	51	1,089 7 0		
				1968	34,968 14 6
		20,630		Total for six months	£358,333 4 6

ORIGINAL CORRESPONDENCE.

NEW TARIFF—FOREIGN COPPER ORES.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—The proposition of Government is to admit foreign copper ores, whose produce may be sold in England for home consumption, on the payment of 5 per cent. only, and to reduce the duty on foreign bar copper from 27*l.* to 10*l.* per ton. Now, the principle which Sir Robert has adopted is not, perhaps, objectionable, but the rate of duty is most decidedly so; and I trust, therefore, that those the most deeply interested in the question will represent the matter in the proper quarter in its true light, and convince the Government that the plan proposed, if adopted, will ultimately be the cause of the stoppage of many of our mines, at present producing largely, but not profitably, and employing a very great number of the lower classes; and then, let me ask, in case of a war, whence shall our manufacturers, and the Navy Board, derive their supply? If a fixed duty deserve the condemnation it has so justly received on the corn question, equally deserving is it of the same fate on the question of foreign ores; and I shall be surprised, indeed, if the Minister do not so view it on reconsidering the matter. The 5 per cent. on ores from Cuba is a mere nothing, compared with the additional prices the ores will obtain hereafter (under the new tariff); and, with respect to the ores from Chili, the effect of the new duty will be to drive the miners there to the erecting of furnaces, and smelting the poor ores into regulus, and an increase of furnaces there will lead to coal mining, which the late accounts report to be a favourite speculation already. Many other objections may be started, which you, of course, will supply in your remarks on the Minister's new tariff, and, therefore, for the present, I would suggest a duty of 5 per cent. on ores under 20 per cent., 7½ per cent. from 20 to 25, 10 per cent. from 25 to 30, and all above 15 per cent., with an additional 10 per cent on the amount of duty whenever coke copper sells under 95*l.* per ton, and 10 per cent. off when coke copper yields more than 110*l.*—the price of copper might be governed by the Government purchases.

Hoping you will lend your powerful aid to serve so important an interest from impending ruin, I am, Sir, your's, &c.,

Strand, March 17. AN ADVENTURER.

[*Our correspondent will observe, on reference to the preceding columns, that we have not neglected to make our observations on the all-important subject on which he writes.*]

PRESENT STATE OF THE IRON TRADE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In a tabular statement of the number of furnaces in this kingdom, published in your Journal of the 5th inst., I perceive, under the head "South Wales," that the "Clydach Works" are represented as belonging to the "Bisenaron Company." This is not so; the Clydach Works belong to the "Clydach Iron Company," and are wholly unconnected with any other. A SUBSCRIBER.

Clydach Iron Works, Abergavenny, March 12.

ON THE NATURE AND QUALITIES OF SULPHUR.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—I beg to thank you for placing in such a prominent position my humble endeavours to draw attention to what I consider a subject of great interest and importance, as you have done by devoting a leading article to remarks upon it in the Journal of March 12. In reply to your remarks on my letter of the 8th, as impugning the accuracy of your statements with reference to the cost of Sicilian sulphur, I beg to state that I refrain more upon facts than figures, not being in possession of *data* to calculate the cost in Sicily I took the price which I had paid for the article in England. In my letter of the 8th of March I state that I had bought Sicilian sulphur duty paid in England at 4*l.* 10*s.* per ton (if my memory serves me correctly, in the spring of the year 1827). I admit the possibility of that parcel having been sold at a loss, and state further, that I never afterwards bought it so low. I therefore concluded I might safely take the price of 4*l.* 10*s.* as a *minimum* price, and that, as freight, duty, and charges could not be fairly taken at less than 2*l.* 5*s.*, no more than that sum would be left for the shipping price in Sicily. I may here remark, that I have frequently bought parcels of sulphur, duty paid, at 5*l.* to 5*l.* 5*s.*, which induced me to hazard the opinion that you had estimated the cost in Sicily as too high when you named 4*l.* A variety of circumstances might account for the article being sold at a price below the actual cost, such as having been taken in barter for another article upon which a large profit had been made, and the desire to realise at a time when the market for sulphur was depressed by a great accumulation of stock. I shall be glad to find that the actual cost in Sicily is higher than I had laid my accounts for; and I should rejoice, too, in seeing the present import duty of 10*s.* raised to 5*l.*, not that my proposed speculation requires any such addition to make it pay, but as an impulse to induce capitalists to embark in a novel undertaking. In all such cases I consider it prudent to take a minimum price as the basis of calculation. Should an opportunity present itself, I shall be prepared to prove the efficacy and simplicity of the process, and the purity of the article, but you must excuse me for acting with due caution until I secure to myself some portion of the benefits.

Liverilly, March 15. T. H. LAUGHTON.

PRESSURE-ENGINES *v.* WATER WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In reading my pressure-engine calculations in your Journal of the 12th inst., I fear that gentlemen who are not practically acquainted with the mode of calculating the power may be led into confusion, considering it abstruse through a small error. In my way of pressure calculation, compared with Mr. Budge's wheel calculation, I find that a thirty-foot wheel is far superior to a thirty-foot pressure—for instance,

Buy thirty-foot pressure..... 120 feet water per stroke
Deduct for pressure friction thirty feet, or three-
thirds (being the whole), would be ..... 120—000 left—consequently a thirty-foot pressure could only be working up and down-stroke performing no duty; add a load to it and it would immediately stop; but 120 feet of water to one revolution over a thirty-foot wheel, three-foot crook (same proportion as a five-foot crank would be for a fifty-foot wheel), would raise sixteen feet of water fifty feet high, or one foot of water, containing about six gallons, 133 fathoms high; please, therefore, correct the following errors:—viz., a fifty-foot pressure..... 120 feet per stroke, should be "deduct thirty feet, or three-fifths"..... 75—30, instead of "deduct 30½ feet."—Also, a 100-foot pressure..... 120 feet per stroke, should be, "deduct thirty feet, or three-tenths"..... 37½—9·7½, instead of "deduct 30½ feet."

Scientific practical men will not require this explanation, but I beg to correct this morning error in order to make it more intelligible.

Carnarvon, March 14. P. V. W.

IMPROVEMENTS IN THE ASCENT AND DESCENT OF DEEP MINES.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In your valuable Journal of the 5th inst. I perceive a letter from a Newcastle friend, signed "M. D.," on the subject of machinery for the ascent and descent of miners. "M. D." has drawn a plan of the lease which he states are working in his district for conveying to the surface the produce of the mine and the people, and which are conducted to worked by rope or chain. It is said that nothing can exceed this apparatus in safety and precision, even at the rate of 100 fathoms per minute. This sort of machine may do for a coal mine, where, perhaps, there may not be more than two or three coal seams, not more than fifty men at work—which is quite different to the deep shafts in our Cornish mines. In many places, and in the Fowey Consols there are from ten to twenty landing places, or levels, in a shaft 200 fathoms deep, consequently this sort of machine, from a reasonable calculation, in our shafts would take four minutes to discharge one turn. Supposing there be two working in one shaft, and notwithstanding "M. D." has not stated the number three hours every, I will assume they may be made to contain six persons, therefore, after this rate, six men only would be hoisted every four minutes.

Now, I should suppose that "M. D." is not aware of the number of men that go down our large mines every morning—for instance, in Fowey Consols there are about 600 at the first corps, and nearly 200 that relieved their comrades at six o'clock, consequently, by "M. D.'s" sort of apparatus, it would take about two hours and thirteen minutes in our shafts to draw up or send down 600 men, and which would be of a rate quite fast enough, considering the different landing-places or galleries. Now, "M. D." states that the one about being erected at Tresavean Mine is her show and dangerous, and will not answer. I do not speak on positive, but on I se presumptuous as to fancy that any plan that I might be a party to in proposing would, or could not, be excelled. I cannot say but that I differ in opinion from "M. D." altogether as to the sort of machine best to be applied in the deep Cornish mines, notwithstanding I agree partly with him as to Tresavean, that it is dangerous and complicated; but, while he thinks it too slow, I consider it too fast, and contend that one rod working in the shaft, as per plan and model by Mr. West and myself, now in the Polytechnic Hall, Falmouth, is far less complicated, less dangerous, and less expensive than two rods, and that one rod working six twelve-foot strokes per minute, for 200 fathoms in length, would bring up or send down men in seventeen minutes, which is fast enough for the miner to ascend or descend. It may be seen by our plan that 100 men may be coming up on one side of the rod while another 100 men are going down the other, yet but 100 on the rod at a time, each stopping alternately, while the rod goes the up and down stroke, on fixed collars in the shaft, which would prepare them for the next lift, and prevent a sickness, which two rods in constant motion would very likely produce. J. PUCKEY.

Fowey Consols Mine, Cornwall, March 14.

ASCENT AND DESCENT IN DEEP MINES.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In my description of the plan of admitting water, &c., on the machine giving motion to the rods, the recurrence of the word *disk* instead of *dish* must have confused the readers of it: with this correction I presume on your courtesy in allowing me to proceed with the manner in which I produce the needful pause for the climber to pass from stage to stage on rods which I propose to reciprocate up and down the shaft.

Let A (*see* fig. 1) be the small cog-wheel or pinion attached to the axis

Fig. 1.

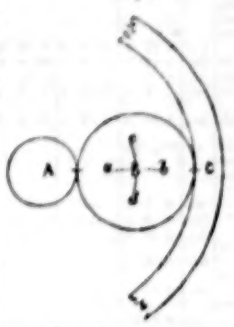
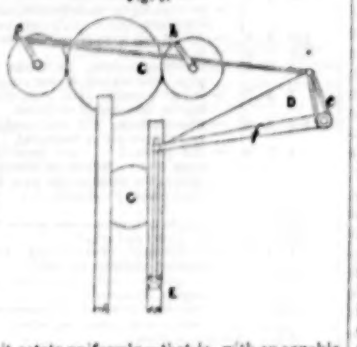


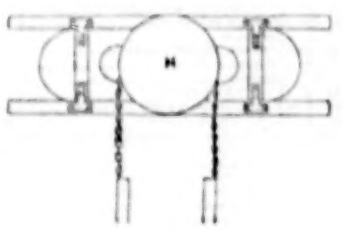
Fig. 2.



of the driving engine, and let it rotate uniformly—that is, with an equable motion; let B be a wheel, with an eccentric axis at *a*, one-third of its diameter; let C be the ring of a wheel, concentric with A, to keep B and A in gear; let motion take place with A, then will the axis *a* play in a groove * from *a* to *b*, while the centre B oscillates between *c* and *d*; then let the axis *a* be the nearest possible to pinion A—that is, at a distance of one-third the diameter of B—then, if the circumference of A moves one foot per second, the interior point of B in contact with it must also move one foot per second, while its opposite or exterior point at a distance from *a*, two-thirds of B's diameter, must move twice as fast as the circumference of A. Now, suppose the axis *a* to arrive over at *b*, and the exterior point in the circumference of B to arrive around to touch A, then the long and short radii of B will have exchanged places—that is, the two-thirds become interior, and the one-third exterior—then circumference of A going as before, one foot per second, causes the now exterior point of B to move but six inches per second, so that during the round of B there are two points in its circumference, which, as they successively assume the exterior position, the one carries the ring C twice as fast as A, and the other only half as fast, the difference being as 4 to 1, as before spoken of; and the wheel C is employed to move crank-wheels and bobs, or as may be—thus the bob D (*see* fig. 2) being only attached to one rod, as at E, the rod F being attached over a balance-wheel as at G, of which more to be said hereafter. The length of the stroke in the shaft is governed by the proportions in lengths of *e* and *f*. The above arrangement is plain and practical, but, instead of the bob D, I have in my model a rectangular rack, into which the crank pins *g* and *h* work, and carry it forward and backward. This rack (*see* fig. 3) works a pinion concealed by H below;

Fig. 3.

Fig. 4.



then the length of stroke in the shaft increases with the size of H only, all the other wheels being the same for any stroke. The front of the machine, with the pinion and balance-wheel added, appears as in fig. 4. This arrangement, involving so many wheels, has been deprecated for its complexity, but I know not how to dispense with any one of them unless the variable admission of steam or water described in my last is sufficient to impel the common crank with a variable velocity—supposing the flow of either to almost cease at the dead point. The length of this train of work may be twelve feet, the height six feet, and the thickness quite within a two-foot wall, except the oscillating wheel H, the axis of which is necessarily prolonged over the shaft. JOHN PHILLIPS.

Tredrissiff, Feb. 28.

THE BUDE LIGHT—ITS INVENTOR.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—Some time since I addressed you on the subject of the Bude Light, under the impression that that communication would be sufficient—as requainting you with the perpetration of a gross fraud by Dr. Lardner and Mr. Gurney, in appropriating to themselves the invention of Mr. Lotthead, a correspondent of your Journal—to secure your powerful assistance in exposing the unworthy conduct of those parties, and to do an act of justice towards the ingenious gentleman so wronged, in setting the public right as to whom they are indebted for that excellent invention. My intention was to have forwarded a further communication, with abstract of Mr. Lotthead's paper, read before the British Association by Dr. Lardner, but, finding, from a note attached to a letter from another correspondent, that you intended to publish the letter entire, I was in hopes that an early Number would contain it, with sufficient Editorial remarks to awaken the plagiarising Doctor to a sense of shame at his conduct, and to satisfy the public of the base uses made of an excellent suggestion contained in a paper intrusted to his care, by a more worthy, although more humble, follower in the paths of science.

Some weeks having passed without the least notice of the subject, am I to conclude that your columns are but well occupied in silence of noticing the subject, or that you do not feel sufficient interest, or dislike, to remember that intimation, which in course might be expected, in exposing a scientific fraud? and which, I may observe, appears to me is the duty of the conductor of a paper of so high a character, and devoted to such laudable purposes as the *Mining Journal*. J. J.

Grey's Inn, March 13.

[We have to thank our correspondent for keeping attention alive by his communication, but we may assure him that the subject has not been lost sight of by us—indeed, we have only awaited the receipt of information, which will, we hope, immediately prove that not only is to right, but that much wrong has been done Mr. Lotthead, to whom, with our correspondent, we are inclined to believe the merit of the Bude Light is due.]

* There are three wheels of size B, their axes being united into cranks to each Bobbins and axe (the equal elevation to eliminate); these three wheels serve as arms to the ring C. The crank pins have reference as well for the same purpose.

DESULTORY OBSERVATIONS ON VARIOUS SUBJECTS.

WILLIAMS'S PATENT FURNACE.

The discussion on combustion and fuel, which has so long occupied the columns of the *Mining Journal*, is degenerating into personal contention. That a discussion of so much importance should end unsatisfactorily, and that from the bad feelings of those engaged in it towards each other, and not from the unpractical nature of the subject-matter of it, is not to be permitted, if reasonable remonstrance will avail to restore order and induce amenity. In discussions on points of science, truth is the only object that should be aimed at; irritating and insulting language should, therefore, be avoided, for, in the tumult of irritation and passion, truth is either lost sight of or passed unheeded—in proof of which we have Mr. Hood's disingenuous perversion of a passage in Mr. Williams's Treatise, and which his subsequent apology has by no means palliated. Ridicule and harsh language can be used with propriety only to repress the presumptions of confident ignorance or the encroachments of vice. I am certain the gentlemen I allude to will, on reflection, see how much they derogate from their dignity as scholars and philosophers, and how much they cause to be lost to the world by ill-natured contention, and that, seeing such consequences, they will avoid the causes.

Mr. Williams has proved that the gases evolved from the fuel in a steam-furnace may be consumed; but he has furnished little practical evidence, and that so vague as to be almost valueless, that they are perfectly consumed, or consumed so far in his furnace, as to make the saving of fuel thereby worthy of consideration. The theory of Mr. Williams's patent is unexceptionable in my judgment; but does the practice square with the theory, and if not fully, in what degree? is a question asked by many. I presume it would, therefore, be worth Mr. Williams's while to adduce evidence of the actual amount of saving of fuel effected by one of his furnaces in common use. There can be little difficulty in obtaining such evidence, and until it is obtained and made public, the objections to his furnace will continue to have greater influence than Mr. Williams will, perhaps, believe. Mr. Hood has asserted and reasserted, in decided terms, that steam delivered into a chimney will prevent the emission of smoke; and, moreover, he has produced what appear proofs of the fact. I do not dispute Mr. Hood's proofs, but I never witnessed such result from the action of steam, and I have the means of daily and hourly observation. Is Mr. Hood personally cognisant of the proofs he offers? It is a common notion that steam will act as Mr. Hood asserts; but, if it do, it must be under some peculiarity of condition I cannot discover, and that I should be glad to be informed of.

In the uproar of contention about the theory of combustion, the relative value of the different kinds of fuel has been totally lost sight of. Mr. Williams maintains, if I understand him rightly, that common coal, with his furnace, is superior to coke and stone coal, because the heating powers of the carbon and gases of the coal must be superior to the heating power of carbon alone. But before this can be admitted, Mr. Williams must prove that the gases arising from the combustion of coal in a boiler-furnace can be consumed entirely and perfectly by his system; and also that the same amount of oxygen enters into combustion in a common coal fire as in a fire of coke or stone coal—the latter being in the condition to produce perfect combustion. In other words, Mr. Williams must prove that, with his furnace, he can, in a given time, produce as much heat from common coal as from coke or stone coal, under the conditions of supply of oxygen proper to each.

I throw out these observations with a view to recal the attention of Messrs. Williams, Brough, Leighton, and Thompson, to the subject.

MR. MONTAGUE'S GEOLOGY.

The theoretical essays on geology, by Mr. Montague, display talent and learning, and have at least the merit of originality sufficient to give us pause. I do not agree with Mr. Montague's reasoning throughout, nor with all his notions, and some of his facts require authenticating—but, right or wrong, I admire the boldness of his philosophy. I infer Mr. Montague belongs to the Kantean, or Transcendental, school of philosophers; but be that as it may, his phraseology smacks of that school, and is much too frequently objectionable, being obscure and equivocal, when it should be clear and unequivocal. Plain English is quite adequate to any purpose of language. Our tongue will never owe any thing to the Transcendentalists—Mr. Herand and his Magazine notwithstanding. German owes nothing to Kant. My purpose is not, however, so much to remark on Mr. Montague's writing, as to thank him for his essays, and advise him to eschew notice of fanatics like Mr. Wilson. If he stops to remark on the verbiage and literary garbage of every muddle-head, he will have more to do than he, perhaps, calculates on. The cry of Atheist has lost its potency.

> —— Let us ponder boldly—'tis a base
> Abandonment of reason to resign
> Our right of thought—our last and only place
> Of refuge.

WATER-WHEELS.

The Bickleigh "Miner" has broached a subject of much interest, and one little understood by ordinary mechanics; but cranks, as proposed by the "Miner," would be a drawback, instead of an improvement; they would, at points, cause great and sudden disequalisations of the load on the wheel, by destroying the reciprocal action of the pumps. With right-angle cranks, when one crank would be vertical, and the other, of course, horizontal, one set of pumps would be at half-stroke out, and the other at the end of the stroke in; therefore, what would occur when the latter began to be risen to the vertical, and the other depressed to horizontal? Clearly an increase of load on the wheel, to the amount of the column of water then set in motion. At other points of the revolution of the cranks, it is equally obvious that both sets of pumps would be making simultaneous strokes. With cranks on the same plane, in opposite directions, the one stroke of the pumps ends instantly before the other begins, so maintaining an equable load, or nearly so, on the wheel.

Touching the speed of wheels, it must be manifest that they cannot exert the full power they are capable of, if they do not move slower than the impelling stream; how much less depends considerably on the construction of the buckets. But it must also be obvious, that the speed of the wheel must not, in all cases, bear the same proportion to the velocity of the stream—there is a speed beyond which wheels should not move. The speed of mill-work and of pumps depends on other circumstances than the speed of the wheel that gives them motion. Pumps should invariably be worked with less velocity than that at which the space between the bucket and the stand stock is filled from the suction-pipe. With beam-lifting engines the maximum of true velocity is, perhaps, never passed; but crank-engines often go at random with pumps, and so also do water-wheels, either from improper speed or incorrectly-proportioned cranks. No writer on mechanical philosophy I am acquainted with, except Young, has noted anything of the speed pumps should be worked at, but abundance on the size of suction pipes, and that, mostly, in ignorance of the practical necessity of making them of smaller bore than working-barrels.

Our Bickleigh inquirer will find that the effect of pumps (in condition, of course) worked by a water-wheel depends on the speed at which they are worked, and that speed on the speed of the wheel, and on properly proportioned cranks, or gearing. I need [illegible] nothing of the application of governors. It would scarce suit the *Mining Journal*,* or I would put together, in a popular manner, the best practical information on water-power that the most worthy authorities furnish; but if the gentleman who has induced these remarks should be in London, he will find, at Mr. Weale's library, great store of works on hydraulics; there are several excellent [illegible] French Treatises I recommend to his attention.

"N. V. [illegible] Holywell, is entirely wrong in asserting that the power of water p[illegible] engines depends on the gravity of water—it depends altogether on [illegible] other principle. A pound of water may be made to exert the force of tons. His question as to the height of a column of water necessary for a "pressure-engine," to equal a 50 feet wheel, as far as mere static force goes, can be answered only by informing him that it will depend on the diameter of the base of the column. A column of one foot would suffice, with a sufficient base. The velocity of the engine piston would depend on the velocity of the index and effux of the water.

MINE SURVEYING.

There is something hugely mysterious and difficult in mine surveying if we must judge from the numerous [illegible] communications and communicators we have of late been favoured with; but they remind me of the devil showing

* With all our deference to our correspondent, it is just such practical information that does suit the Journal, and the insertion of which must tend to advance it, not only to the estimation of the scientific world, but its general utility to all engaged in mining pursuits.

the pig—great cry and little wool. The "Old Pegging Captains" have been unmercifully pelted and jibed at, but, in my poor opinion, with small reason. What are they guilty of?—Geometrical construction on a large scale—nothing in the world else. With the requisite care, all things being equal, they ought to be as accurate in their results as the gentlemen who ridicule them; in fact, they are freer from the chances of error, having fewer figures to deal with. Some blunder, to be sure, and so do some of the trigonometers. I do not mean to depreciate the mathematical methods—far from it—but a volume of lograthims in the hands of a man little used to figures would be like a razor in the hands of a child; he might get through with it, as the child might escape being maimed, but the odds would be against him; and as to trigonometrical calculations, independently of the aid of logarithms, by such a man, they would be fearfully dangerous. In short, nobody but a fool would suffer a mine captain to pursue any other than the "pegging system," unless his mathematical attainments were of a superior kind, and his hand well practised. In ninety-nine cases out of a hundred the "pegging system" is the shortest and safest—object who may; and I may remark, *en passant*, that the colliers are not judges of the system I would bow to—they know nothing of the whys and wherefores of it.

Whatever mathematicians may say, it is an axiom with practical men, that the shortest way of working a problem, or drawing a figure, is the best; they invariably avoid masses of figures when they can, and construct mechanically, when, mathematically, it would be waste of time and source of error. In forming an ellipse, a cissoid, or hyperbola, why am I to be humbugged with ordinates and diverging lines, when I can describe the curves slap, without any bother, by means of a couple of nails and a bit of string, or a trammel? If the figure-men might have their way, the bullet-headed geniuses would stop not only "pegging captains," but three-fourths of the mechanics in the country.

Under this head, "Bob-at-a-Pinch," *alias* "Bob Jackson, the coal carter" *(rara avis, et similima nigroque cygno)*, though I am rather bothered to understand what he can have to do with such an affair, asks a question touching the extracting of water from a pit end—that, I am sure, he will never get answered in a newspaper. The water "Bob" speaks of may easily be commanded by help of the winding-engine, if it have three or four horse-power to spare. If "Bob" is master, and not man, he had better consult some mining engineer on the spot, who is acquainted with the various species of modern motive power.

PUMP-BUCKET LEATHERS.

The gentleman who inquires (Journal of 26th February) respecting pump-bucket leathers, if his pumps are of pretty large diameter, will find his remedy in using a metallic bucket without leathers. The working barrel must be truly bored, and the bucket turned to fit truly, but so that it will work sufficiently free. With the due velocity little water will be lost. Has he any objection to plungers?

BRITISH SULPHUR.

There can now be little question that the British sulphur interest is to be sacrificed—Bowring's motion is its death-knell. The arch-apostle of free trade can mean the interest no favour. Cottons that dissolve at the sight of a washing-tub must be manufactured and sold to foreigners—foreign commerce must be extended, let what may become of the manufacture of home products and the cultivation of our own soil. Peel is no more to be trusted than a steel pricker in tamping a charge; he will throw all he can, with safety to himself, little by little, into the insatiable maw of plutocracy. Bowring's next motion will be one to affect the copper interest; he must be watched anxiously, for he means mischief. * * *

Pengorphwysfa Mine, Anglesey, March 2. B. DONDRAVAND.

PROCEEDINGS OF PUBLIC COMPANIES.

BISSOE BRIDGE MINING COMPANY.

The adjourned meeting of the proprietors in the above company was held at the George and Vulture Tavern, on Thursday, the 17th instant.

ROBERT HICHENS, Esq., in the chair.

After reading two letters which had been received from the mining captains, the CHAIRMAN explained that it was for the meeting to decide whether they should dissolve the company, and, according to recommendations they had received, endeavour to sell the mine in London, or pull up the materials, and sell them by auction on the spot. Their position was most decidedly altered for the worse, and if Sir R. Peel's proposed tariff should be passed into law, the value of their property would be very materially decreased, therefore, the decision of the proprietors should be given without loss of time.

Mr. LYNE then read a long statement of the affairs of the company, wherein he brought some very grave charges (amounting to dishonesty) against Mr. Carne, and blaming very severely the management of Messrs. Coatsworth and Hitchens, for having allowed themselves to be led by Mr. Carne, and, by his advice, deviating from the prospectus, and violating the contract by which the company was formed. In the original prospectus it was stated that the Bissoe Bridge Mine was situated within a few yards of the Consolidated Mines, in the parish of Gwennap, while the point upon which the directors had been working was above 6000 yards from the Consolidated Mines, and in the parish of Kay; and, instead of working at a point that was proverbially rich, they had expended all the means of the shareholders on a point that was even better known as barren and unprofitable—in fact, instead of the directors working the Bissoe Bridge Mine, in Gwennap, they had been working Wheals Widden and Boden. This change had never been communicated to the proprietors, and, consequently, the directors were liable for the losses the proprietors had sustained. Mr. Lyne concluded by moving, "That a committee of five proprietors should be appointed, to examine all books, papers, &c., belonging to the company, and to report at a special meeting to be called for that purpose."

The CHAIRMAN and Mr. COATSWORTH stated that the books were, and always had been, open to all the proprietors, and that every facility should be given for investigation, nor would they shrink from any responsibility that it might be proved they had incurred.—Mr. LYNE stated that the books were not open to the proprietors, for he had taken a friend of his—a mining captain—with him to Cornwall, to examine the mine and books, but the books were at Mr. Carne's house, thirteen miles from the mine, and could not be got at, so all his expense (above 40*l.*) was thrown away. Of course, the captain wished, after coming from underground, to see the cost book, in order to see if in all that had been done due economy had been observed.

Some conversation ensued upon this subject, during which the directors explained that the books were removed from the mine because they had no proper place to keep them in on the spot, and that Mr. Carne had invited Mr. Lyne to his house, where they could have been inspected, or Mr. Lyne could have waited a day, until they could be sent for.—To this Mr. LYNE replied, that the books ought never to have been removed from the mine, and that it would not have been right to have partaken of the hospitality of a man whose conduct they expected to have good reason to censure. As to waiting a day, the idea was ridiculous, as mining captains expected to be paid, and he could not spare more time. Mr. Carne had had notice of his intention to visit the mine, with Captain Clymo, three weeks previously.—Mr. WHEELER believed that the books had been purposely removed.—Mr. COATSWORTH then said, to show that the Kay Mines were not unproductive, since 1837 there had been raised—

Tin	£10,672 11 10
Lead	4,869 13 10
Mundic	622 10 6
Arsenic	73 7 0
Black-jack	634 15 0
Ore mundic	660 9 0
Making a total of	£17,473 0 2

Mr. POLLARD wished to know what had been expended upon these mines?—The CHAIRMAN replied, they had lost 11,000*l.* by them.—Mr. LYNE then stated that the mines were barren and unprofitable, they having expended 11,000*l.* upon them, besides the 17,000*l.* raised.

After some further discussion, Mr. POLLARD called upon Mr. Barrendale (the solicitor of the company) to draw up the resolution moved by Mr. Lyne, in a proper manner; which Mr. BARRENDALE refused to do, [illegible] never heard of such a request being made by parties dissatisfied with the directors, and, after a few further remarks, he threw up his [illegible]—Several proprietors then called for the resolution to be put to the meeting, but this the CHAIRMAN refused to do, and evidently broke up the meeting, declaring that he would having nothing to do with such a motion, [illegible] any meeting either the proprietors might appoint amongst themselves should have free access to every book and paper belonging to the company.

MINERAL RESOURCES OF SOUTH AUSTRALIA.—At the meeting of the Royal Geographical Society, on Monday last, Colonel Gawler gave a long and interesting detail of the present state and condition of the colony of South Australia, in which he referred, at considerable length, to the quantity of wood, and the extensive mineral resources of the country, particularly of iron ore; every variety of [illegible] some of which, the Colonel said, was equal to that of North Wales, and a [illegible] quantity had lately been sent to Sydney; and limestone, some of which [illegible] in quality the best Parian Statuary.

MINING CORRESPONDENCE.

FOREIGN MINES.

BRAZILS.—Her Majesty's packet *Swift*, arrived on Saturday afternoon from the Brazils; she left Rio de Janeiro on the 19th of January, and having a freight of between 30,000*l.* and 40,000*l.* in gold dust and diamonds. Exchange 29½, at sixty days on London; Paris, 330; Hamburgh, 645.

IMPERIAL BRAZILIAN MINING ASSOCIATION.

Rio de Janeiro, Jan. 18.—We have now the pleasing satisfaction of informing you that we have received from the Government, for your account, 82,800 milreis, in 6 per cent. stock, and 85 ditto in currency, being one-third of the repayment of the deposit, as shown by the following statement, viz.:—

100,000 milreis in silver, at 26 per cent. premium.
176,000 ditto in stock, at 70½ ditto.
248,763 ditto, in three payments, in stock of 82,800 milreis each—248,400 milreis; balance of stock 363½ milreis; 257 milreis in currency, in three payments, each of about 85½ milreis. We have to receive the other payments in February and March, but on the same calculation in stock, bearing interest from the 1st inst. We have likewise the pleasure to hand you enclosed bill of lading of 211 lbs. 8 oz. 3 dwts. 3 grs. of gold dust (valuation about 900*l.*)

NAYLOR, BROTHERS, and Co.

Gold Report.

	Lbs.	oz.	dwt.	grs.
Total raised from 1st July to 31st December	521	0	9	12
Total raised for the year ending December 31, 1841	931	4	8	0
Produce for January 1, 1842	0	11	12	0

BRAZILIAN COMPANY.

Cata Branca, Dec. 19.—From the great quantity of rain which has fallen we have been somewhat hindered in our surface works, and prevented from keeping the stamps supplied—the greater evil of the two. It cannot, however, be expected, that our present force, under the most favourable circumstances, will ever be able to break 600 tons a-week, which quantity our engines, with water enough, could stamp. This has my attention.

Dec. 30.—Appearances in the mine continue the same. I regret, however, to say, that, from the failure of six pieces of our deep adit stull timber, we shall fall more than usually short this week of stone. In the cross cut, at San Antonio, another vein of soft quartz, two feet wide, has been passed. I am still continuing the cross-cut south, not feeling sure that it is the lode.

Jan. 4.—I see no reason to be dissatisfied with the present appearance of the bottoms. At San Antonio we have cut the lode, upon which we are now driving east. It is becoming wider, and more promising in look, but still samples poor. I am, however, satisfied that we shall yet meet with something there that will repay us. The gold on hand, the produce from October 30th to December 31st, and amounting, exclusive of duty, to 134 lbs. 8 oz. 8 dwts. 10 grs., will be sent off to morrow.—[Arrived per *Swift* packet.]

W. COTESWORTH.

Gold return for three weeks to 31st December, 80 lbs. 8 oz. 7 dwts. 12 grs.—Ditto for the month of December, 94 lbs. 10 oz. 16 dwts. 8 grs.

ST. JOHN DEL REY MINING COMPANY.

Morro Velho, Dec. 18.—Average number of heads working the last eighteen days, 57½.

Mine.—On the night of the 13th inst. Morro Velho was visited by a tremendous storm; it rained most heavily for several hours, and, unfortunately, the launders to Hawkins's engine, which are laid on the surface, over Champion Mine, became clogged by a stone carried down the hill, and turned the stream into the mines. The sump was forked this morning; sinking has been stopped the whole week, and, although the stamps have been supplied with stone, it has not been possible to do so without taking ore wherever we could get it. There was a large quantity of stone broken under water; yesterday the hauling-engine went to work in Bahu shaft, and the supply of stone is good. The produce of Gamba Mine continues low. At Champion Mine the stone does not look well on the floors. We have driven further to hill than the ancients did there; the lode has been heaved, or twisted, by a horse of killas, about six feet thick, running nearly at right angles with the country; Captain Prideaux believes that the lode will be found to resume its original direction, which would be very gratifying, as we should then have a mountain of backs. To the west we have cleared up four fathoms; the lode in the bottom is worked flat, and had only been abandoned when further working was rendered impossible by the water; a line of soft black formation runs through it, near the footwall, from one to two feet big; this is the stuff the ancients went after, called by them "fulha," leaving the hard stone standing. We have two very good stopes, one east and the other west of shaft, giving the best stone we have on the floors. The lode west is seven feet wide, five feet of which is excellent stone.

Dec. 28.—Average number of heads working twenty eight days, 59·67.

Mine.—A continuance of heavy rains has prevented any staking in the Bahu. We expect the produce will exceed that of November. In Louisa Mine the lode west continues good.

Cost for Nov.—165·24 rs., of which 6017 for stores, &c., from England.

UNITED MEXICAN MINING ASSOCIATION.

Guanaxuato, Jan. 28.—I had the honour to address you on the 21st inst. [not yet received] in anticipation of the November packet, and as that vessel has not yet been heard of, I am afforded the opportunity of heading to you herewith copy of the agreement between the association and the Rayas owners, regulating the time and mode of distribution of the mine profits, as connected with the right due to the association by Rayas. The realised profits of the mine from the 10th October to the 31st December last have been $72,929 5 5, and of the proportion thereof amounting to $12,697 7 5, and corresponding to the 13½ bars of the mine mortgaged to the association for the payment of the general mine debt, the sum of $11,411 6 1 has already been received—leaving $1486 1 4 still to be received in virtue of this agreement. As stated in my last letters, the profits of the mine have been gradually decreasing, and the amount thereof, corresponding to the present month, will not, I believe, exceed $4500, but whether more or less, the amount will be appropriated in pursuance to the enclosed agreement. This decrease of profits, on the other hand, raises my hopes in behalf of a new contract of Avio, and which I regret, will be, I believe, sooner or later obtained.

J. N. SHOOLBRED, Manager.

ANGLO-MEXICAN MINING COMPANY.

The only letter which the company has received by this packet is dated January 28, and contains no intelligence regarding the mines; a letter was dispatched to go by the packet dated the 24th of January, but which has not yet come to hand. The amount of good assets on hand at Guanaxuato, on the 31st of December, is stated to be $133,313, being an increase over the preceding year of $24,000.

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

March 14.—I beg leave to inform you that the lode in the 110 fathom level, west of Forest's winze, is still about six inches wide, with stones of ore; in this level, east of Dingle's shaft, the lode is seven inches wide, of wundle and spar, with a small proportion of ore. The lode in the 100 fathom level west is still about twelve inches wide, and worth 18*l.* per fathom; in this level, east of Wall's shaft, we are still cross-cutting south; the lode in the eastern stopes, in the back of this level, is eighteen inches wide, and worth 30*l.* per fathom; the western stopes, in the back of this level, are still very productive, the lode being two feet wide, and worth 50*l.* per fathom. The lode in the ninety fathom level west is fourteen inches wide, and worth 25*l.* per fathom; the lode in the eastern stopes, in the back of this level, is eighteen inches wide, and worth 24*l.* per fathom; in the western stopes, in the back of ditto, the lode is sixteen inches wide, and worth 33*l.* per fathom. The lode in the stopes, in the back of the eighty fathom level, is fifteen inches wide, and worth 36*l.* per fathom. In the seventy fathom level, west of Wall's shaft, on the Flapjack lode, no lode taken down during the past week. The sixty-two fathom level, east of Wall's shaft, is still without alteration; in driving west of Hitchins's shaft, at this level, on the north lode, is fifteen inches wide, producing good stones of ore, and, upon the whole, may be said to be assuming an encouraging appearance. In the tribute department no material alteration.

V. PHILLIPS.

CORNUBIAN MINING COMPANY.

March 14.—We find the Chiverton lode, going west of engine-shaft, at the sixty fathom level, to continue large, and in appearance kindly, although at present unproductive; and for some time to come we may calculate on driving westward before we get into ore ground, of which you are made fully acquainted with, the rise of ore gone down in the bottom of the fifty fathom level being some distance still below us. The south lode, at this level, we find to be so imbedded in hard ground, and split into branches, that we have suspended driving, and removed the same men to cross-cut north from shaft to cut the north lode, and have about two fathoms more to drive. At the fifty fathom level we expect to hole the winze to the forty in the course of this week; our progress here has not been as fast as we anticipated, on account of a great deficiency of air, and the ground proving harder than was expected. We have been again able to resume the sinking of Murray's shaft, under the 16 fm level, and, as well, have a winze sinking between the old western and Murray's shafts, on the course of Chiverton lode, which is hoisted down to the forty fathom level, but above no lodes were seen as high as the adit in the former workings by tributers; the size of the lode in the winze is two feet, and producing stones of lead; we think it necessary to explore this piece of high ground. The north lode is not yet cut at the thirty-two fathom level, we have about two fathoms more to drive; the ground is rather hard. At the twenty four fathom level, on the north lode, going east, it is a large lode, two and a half feet wide, of a promising character, and at times yielding a little ore, but not regular; the ground is favourable, and lode encouraging. At the sixteen fathom the lode has much of the same appearance and size as at the twenty-four fathom level. The eight fathom level going east also is rich as usual. On our last setting day, held on the 4th inst., we set the sump shaft to sink below the sixty fathom level, also a new shaft from surface, called Stainsby's, fifty-five fathoms east of Clifford's shaft. The number of tribute pitches then set was twenty, varying as under—one at 1*s.* 4*d.*, one at 13*s.*, one at 30*s.*, one at 31*s.*, one at 40*s.*, one at 48*s.*, and the remaining fourteen from 50*s.* to 7*l.* per ton. Next Thursday we shall sample about the same quantity as the last (say fifty-five or fifty-six tons). The new boiler is also connected with the old one, and will be worked with advantage very shortly.

R. ROWE.

REDMOOR CONSOLIDATED MINING COMPANY.

March 14.—In the south end, at the sixty fathom level, the lode is about six inches wide, very good work for silver-lead ores; going north, at this level, the lode is twelve inches wide, saving work. At the fifty fathom level, in the north end, the lode is split into two branches, of spar, fluccan, and lead ores; in the south end, at this level, we have intersected an east and west copper lode, about two feet wide, yielding good stones of ore, and an abundance of mundic. I have this day set six feet to open on its course eastward, which will enable us to judge more clearly of its nature and underlay. The lead lode in this end is eight inches wide, saving work. The copper lode, going east, at this level, is eighteen inches wide, composed of capel, spar, mundic, and jack. The lode in the south end, at the forty fathom level is eight inches wide, lready throughout.

F. R. ROWE.

TAMAR SILVER-LEAD MINING COMPANY.

March 14.—In the 135 fathom level the lode is six inches wide, still producing a small quantity of ore. In the 115 fathom level the lode is one foot in width, carrying branches of silver-lead ores. In the 105 fathom level the lode is eighteen inches wide, saving work. In the ninety five fathom level the lode is one foot in width, producing some good work. In the eighty-five fathom level the lode is two feet wide, composed of soft spar, intermixed with silver-lead ore. In the seventy five fathom level the lode is one foot wide, producing some promising work. In the sixty five fathom level the lode is eighteen inches wide, carrying some rich branches of ore. In the fifty-five fathom level we have just commenced driving; the lode is in a disordered state, in consequence of being in slidy ground. In the forty five end the lode is two feet big, one foot of which is good work. In the winze sinking from the thirty-five the lode is two feet wide, carrying branches of silver-lead ore. The tributers are working well, and their prospects in general are encouraging.

J. SPRAGUE.

TREGOLLAN MINING COMPANY.

March 14.—I beg to inform you that the lode in the forty fathom level east is two feet wide (the orey part), and worth 10*l.* per fathom; in extending the cross-cut north, at this level, the ground is somewhat harder than it has been of late, and also very wet—consequently, we think we are approaching near a lode ore branch. We have experienced some little improvement in one or two of our tribute pitches since my last.

JAMES NINNIS.

WEST WHEAL JEWEL MINING ASSOCIATION.

March 14.—The ground in Buckingham's engine-shaft, sinking below the seventy, is much the same as when last reported. At the seventy cross-cut south we have cut Wheal Jewel lode, in this level, west of the cross-course, from eighteen inches to two feet wide, composed of spar and stones of ore; we have not opened on it, as we are anxious to see it on the eastern side of the cross-course. The fifty-seven east, on Wheal Jewel lode, is producing two to three tons of ore per fathom, and worth 6*l.* per ton. The fifty seven west, on this lode, is two feet wide, with good stones of yellow ore. In the winze under the forty-two, on the south branch, the lode is worth 6*l.* per fathom. We sampled last week ninety five tons of ore.

S. LEAN.

TRUFOIL MINING COMPANY.

March 14.—The lode in the forty fathom level, east of engine-shaft, is one foot wide—tribute ground. The lode in the thirty fathom level, east of Williams's shaft, is six inches wide—tribute ground. Tregulias's lode, at the thirty fathom level, east of Johns's shaft, is four inches wide, producing some ore; the north part of the Mine Park lode, at the twenty fathom level, east of the cross-cut, is two and a half feet wide, and producing some good ore.

H. WILLIAMS. J. MORCOM.

TRELEIGH CONSOLS MINING COMPANY.

March 12.—The seventy west continues to disordered ground; this level is a little more promising, composed of spar, with mundic and a little ore. The lode in the sixty west has not been taken down in the past week. The fifty west is two feet wide, and worth 15*l.* per fathom; this level east, working on tribute, is rather improved. At Good Fortune the forty-four east continues orey; the lode is one foot wide, and worth 8*l.* per fathom. The thirty-four west is a little improved, having a leader of ore; other parts are without material alteration.

W. SINCOCK.

UNITED HILLS MINING COMPANY.

March 15.—Williams's Engine-Shaft—There has been no lode broken in this shaft since survey-day. Sixty Fathom Level—In the eastern end of this level the lode is three and a half feet wide, ore of fair quality; in the western end the lode is five feet wide, coarse in quality. Fifty Fathom Level, east of James's Shaft—Lode 3 ft. 6 in. wide, one foot good ore; in the rise the lode is 2 ft. 6 in., eighteen inches good ore; western end, lode six feet wide, orey throughout, but not rich. Diagonal Shaft—No lode broken for the past week. Forty-six Fathom Level, Eastern End—Lode two and a half feet wide, producing some good ore, with a promising appearance; in the western end the lode is three feet wide, producing but little ore. Forty Fathom Level—There has been nothing done in the eastern end of this level since settling-day; in the winze the lode is 2 ft. 6 in. wide, eighteen inches ore. Thirty Fathom Level—Lode eighteen inches wide, six inches good ore. Twenty Fathom Level—Lode three feet wide, producing some stones of ore.

N. LANGDON. S. H. FRANCE.

MINE ACCIDENTS.

Brierley Hill.—An accident occurred on the 4th inst. at Mr. Plant's colliery, by a fall of coal; a man of the name of Raberry was so much injured that he died on Sunday, and has left a widow and seven children.—On Saturday a boy, of the name of Wood, who was employed at Mr. Moore's pit, at the Delph, to drive the horse that worked the gin, walked backwards into the pit, and was killed instantly.

Clay Cross.—On Wednesday last a collier, named R. Bamford, in the employ of Messrs. Stephenson and Co., had the misfortune to get his leg fractured in two places, by the falling of a large piece of coal whilst he was at work in the pit.

Hopwood's Colliery, Barnsley.—Another explosion of fire-damp took place at this colliery on Thursday week, by which two men, named Fairess and Whitely, lost their lives—the first-named was one of the witnesses examined at the coroner's inquest, on the 23d ult., on the four individuals who lost their lives by a similar accident, at the same pit, the particulars of which appeared in the *Journal* of the 5th inst. So soon as the explosion took place, fire was seen to rage a considerable height above the head gearings of the shaft, and was instantly followed by a dense cloud of sulphurous smoke, bearing along with it pieces of wood torn from the pit's sides, and part of a head saw, which one of the unfortunate men must have had in his hand at time the explosion took place. Much credit is due to the stewards of neighbouring collieries for the promptness displayed in their endeavours to render assistance, but the foulness of the pit was so great, that it was impossible for any one to descend with safety for at least two hours after the dreadful occurrence. The morning of the accident was the first time that any one had been down the shaft since the previous explosion.

COAL TRADE.—Statement of the quantities of coals exported from Newcastle during the last two years:—In 1840, 2,846,677 tons; in 1841, 3,125,084—increase during the last year 278,407 tons.

NATIONAL MINES OF SPAIN.—In a document, recently published, of the national property applicable to the extinction of the debt of Spain, in a table of the valuation and yearly revenue of property on hand at the end of May last, which shows that the valuations for sale of the national mines were estimated at 500,000,000 reals, and that the yearly revenue of the same amounted to 26,000,000 reals.

THE AGARUS GALVANICUS.—In the autumn of 1837 the scientific world were greatly excited by the announcement that Mr. Crosse, of Broomfield, had observed insects, of a previously unknown species, come into being among certain voltaic arrangements. Among the various objections urged against their connection with the electricity was the possibility of ova being in the atmosphere. At the Electrical Society, on Tuesday last, a paper was read from Mr. Weekes, of Sandwich, describing experiments wherein he had obtained the same species of insect in a close atmosphere over mercury. Every possible precaution was taken to exclude extraneous matter, into the detail of which we shall not enter. On the 3d of December, 1840, operations commenced; at the latter end of October, 1841, the first insect was seen; on the 25th of November five were detected. Since that period they have been frequently examined. The account contains several interesting incidents with respect to the habits of these strangely produced creatures. Simultaneously with the experiment just detailed another apparatus was put in action in an atmosphere of oxygen gas; on the 20th of February, 1842, eight or ten full-grown insect were observed in vigorous locomotion. The solution whence these insects appear to have emerged was one of silicate of potass, made with materials that were transferred from a furnace heat to boiling water, and filtered under cover.

MONEY MARKET AND CITY NEWS.

CURRENT PRICES OF ENGLISH AND FOREIGN FUNDS.

Consols Money, 89¾ ⅞	Dutch, 2½ per Cent., 52⅜ ⅛
Ditto Account, 89⅞ 90	Ditto, 5 per Cent., 102⅜ ¼
New 3½ per Cents., 99¾ 9¾	Portuguese, 5 per Cent., 34⅛ ⅜
Exchequer Bills, 29 31 pm.	Ditto, 3 per Cent., 20⅜ ⅞
Belgian Bonds, 5 per Cent., 103 4	Spanish, Actives, 5 per Cent., 25 ⅛
Brazil, 5 per Cent., 69 71	Chili, 6 per Cent., —
Danish, 3 per Cent., 81⅛ 2¼	Colombian, 6 per Cent., 26⅛ ⅞
Russian, 5 per Cent., 112¼ 113¼	Mexican, 5 per Cent., 41⅛ ⅜

REMARKS ON THE OPERATIONS OF THE WEEK.

SATURDAY, March 12.—The funds improved ⅛ per cent. to-day on the opening price. The jobbers look upon the proceedings in Parliament as highly calculated to maintain public credit, and to relieve the financial deficiencies without new loans; Exchequer Bills, 29s. to 30s. pm.—A good deal of general business was transacted in the foreign securities, and in Mexican stock there was a rise of 2 per cent., in consequence of favourable news received by the *Thames* steamer, which brought 100,000 dollars on account of the October dividends; there was also a rise in Spanish; and all other stocks were firmer at previous quotations.—There was also a decided improvement in the share market, prices being firm, with a tolerable amount of business.—Imperial Brazilian Mining Association, 7¾; Real del Monte Mining (unregistered), 3¼.—Colonial Bank, 26¾ 7.

MONDAY.—A further improvement in the funds may be noted to-day, with a firm market and considerable activity in business; Consols at the close of business were 89⅞ ⅛ for Money, and 90⅛ ⅜ for Account; Exchequer Bills, 29s. 30s. pm.; Bank Stock for opening, 170¼; and India Bonds, 9s. 11s. pm.—With respect to the new Government scheme of taxation, we cannot do better than quote the words of the *Morning Chronicle*:—"The financial measures proposed by Sir Robert Peel have given general satisfaction. The liberal views enunciated by the Prime Minister have met with great approbation, and the commercial interests are satisfied that they must submit to new taxes for a time, in order to make up the annual deficiency in the revenue. We state this with perfect fearlessness, confident that we tell the truth, and nothing but the truth. Whigs and Tories are agreed that the speech of the Minister does honour to his head, and that the revision and consolidation of the commercial tariff will be productive of great benefits to the community at large."—There was considerable animation in the foreign market; a further advance took place in Mexican, Brazilian, and Colombian Bonds, but there was little doing in Peninsular securities. Money was worth from 3 to 8 per cent. Colombians closed at 26⅞ 6; Mexican, 39⅞ 40⅛; Brazilian, 67¼ 8¼; Danish, 81⅛ 2¼; and Belgian, 103 4.—Railway shares were firm, with an improvement in some of the principal lines, Great Westerns, 90 1; Birmingham, 176 5; South-Western, 58½ 9; Brighton, 35⅛ ⅜; and Blackwall, 11¼.—Imperial Brazilian Mining Association, 8; Real del Monte Mining (unregistered), 3¼.

TUESDAY.—This was quite a busy day in the stock markets, which have in all respects improved in a considerable degree, and business appears to have resumed its old channel of activity; Consols for Money advanced to 89⅞ ⅞, and for the Account to 89⅞ 90; while Exchequer Bills were purchased at the better premium of 35s. 37s., which quotations were fully supported at the latest hours of business.—The improved state of the home stocks led to a corresponding feeling in the foreign market; the South American securities continue in demand, and prices are rapidly advancing. A rise of 1 per cent. was noticed in Mexican, and a rise of about 1½ per cent. in Colombian, compared with yesterday's quotations; this was caused by the settlement of the half-monthly account (which was made with the greatest ease), and the desire of the public to be buyers for investment; the differences settled were to the extent of 4½ per cent. in Mexican, and 2½ per cent. in Colombian, but a large amount of stock was carried over to the next account, the general feeling being in favour of a further rise. Mexican left off 41¼ ½, and Colombian 27 ½. The other stocks were good, but Portuguese made the greatest movement, the 5 per Cents. closing at the improved quotation of 35 ⅛, and the 3 per Cents 20 ⅛; Spanish Actives were last quoted 25 ⅛; Chilian, 75 80; Brazilian, 68 69; Belgian, 103 4; and Danish, 81¼ 2¼.—The share market was also full of business—railways generally being in demand at improved rates.—In mining shares, Imperial Brazilians were done at 10; Real del Monte (unregistered), 3¼ ⅛; and United Mexican, 1¼.—Australasian Bank, 53½; Union of London, 9¼.

In the foreign exchanges the rates upon Amsterdam and Paris remained the same as last post, but Hamburgh, Frankfort, and Vienna were rather higher. The latest negotiations were at 12 4¾ for short bills upon Amsterdam; 12 5, for three months, upon Rotterdam; 12 4¾ for Antwerp; 9 55 for Vienna; 9 54 55 for Trieste; and 25 82½ 85 for Marseilles.

The premium on gold at Paris is 9 per mille, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 25 37½, and the exchange at Paris on London at short being 25 55, it follows that gold is 0·70 per cent. dearer in London than in Paris.

By advices from Hamburgh the price of gold is 433¼ per mark, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 13 9¾, and the exchange at Hamburgh on London at short being 13 10¼, it follows that gold is 0·67 per cent. dearer in London than in Hamburgh.

The course of exchange at New York on London is 108 per cent., and the par of exchange between England and America being 109 23-40 per cent., it follows that the exchange is 1·38 per cent. against England. But the quoted exchange at New York being for bills at sixty days' sight, the interest must be deducted from the above difference.

WEDNESDAY.—The English funds opened with continued firmness, and the price of Consols for the Account touched 90⅛ buyers; but owing to some speculative sales by leading brokers the market lost its buoyancy, and prices receded to 89⅞ 90 for Account, and 89⅞ ⅞ for Money; India Bonds, 10s. pm.; and Exchequer Bills, 35s. 37s. pm.—There was a good amount of business done in the foreign securities, and the tendency of the market continues upwards.—The share market retains its busy appearance, with a further advance in some of the leading lines. Cheltenham and Great Western Railway, 19½; Eastern Counties, 10; Great Western, 92; Grand Junction, 193; Brighton, 35⅞; ditto, Loan Notes, 5¼ ⅜; Birmingham ¼ shares, 30¾; South-Western, 59¾; Croydon Trunk, 122; Manchester and Leeds, 80; North Midland, 71½; South Eastern, 26; York and North Midland, 93.—In mining shares, Imperial Brazilians were done at 10; Real del Monte (unregistered), 3¼ ⅛; United Mexican Scrip, 1¼.—London and Westminster Bank, 22¾; National Provincial of England, new, 10.

THURSDAY.—Business was not so good in home securities, and the transactions that took place evinced a downward tendency. Consols for Account closed at 89⅞ ⅞, and 89⅞ sellers for Money; India Bonds receded to 8s. pm.; Exchequer Bills, 35s. 41s. pm.—The foreign house continues its improved appearance; speculation goes on briskly, and Brazilian is quoted ½ per cent. higher; the other quotations generally maintain the late rise.—The share market was firm throughout the day; an improvement of nearly 20s. per share took place in London and Brighton, owing to a discovery that the company had been twice debited with a sum of 70,000l. The detection of this error will reduce their wants to 330,000l. instead of 400,000l. Great Westerns, on the other hand, were ½ lower; all other lines remain about the same.—Imperial Brazilian Mining Association, 10; Cobre Copper Mines, 33¾; Hibernian Mining Association, 1⅞.—Colonial Bank, 27⅛; National Provincial Bank of England, 8¾.

FRIDAY.—The stock market was steady, with a slight improvement in prices; Consols for Money left off at 89⅞ ⅞, and for the Account 89⅞ buyers; New 3½ per Cents., 99⅛ ⅛; Exchequer Bills, 36s. 41s. pm.; and India Bonds, 9s. 11s. pm.—The foreign securities were not so brisk, and prices in some instances were rather on the decline; Mexican fluctuated between 41 and 41½, and the closing prices were 41¼ ½; Colombian was done as low as 26¼, but they closed at 26⅞ 7; Brazilian and the other heavy stocks, however, fully maintain their improved appearance.—Railway shares continue in fair demand, and, taking the whole aspect of the market, it presents additional firmness, and capital is making way into it, especially in the principal lines, for permanent investment.—In mining shares, Anglo-Mexican Mining Association were done at 1¼; Bolanos scrip, 4¼; and Real del Monte, unregistered, 3¼ to ⅞.—Australasian Bank, new, 14¼; and Union of Australia, new, 23½.

In the foreign exchanges the supply of paper upon Hamburgh was again rather considerable, and there being no particular demand for bills, a further advance took place in the rate. Paris and Amsterdam remained much the same as last post.

At the half-yearly meeting of the proprietors of Bank Stock, held at the Bank of England yesterday, a dividend of 3½ per cent. was declared for the year ending the 5th of April. Calculations were made as to the effects of the new income tax upon the dead annuities and their proceeds, in consequence of which it was resolved that it was most unjust to tax a terminable annuity the same as a permanent one, and representations were directed to be forthwith made to Sir R. Peel on the subject.

[From our own correspondents.]

PARIS, March 17.—5 per Cents., 117f. 35c.; 4 per Cents., 101f. 0c.; 3 per Cents., 79f. 20c.; Loans, 104f. 0c.; Bank Actions, 3215f. 0c.; Bonds de Naples, 105f. [illegible]; Romans, 104¾; Spanish Actives, 25½; ditto Passives, 5¼; Belgian 5 per Cents., 105½, 105¼; ditto 104, 103¼; ditto 3 per cents., 78f. 75c.; Belgian Bank, 840; Portuguese 5 per Cents, new, 35⅛; Dutch 2½ per Cents., 53¼; Haytian Loan, [illegible]; Versailles Railway, [illegible]; Versailles, [illegible]; Rouen, [illegible]; Orleans, [illegible]; Strasburgh to Bâle, [illegible].—Exchange on London, one month, money, [illegible]; three months, money, [illegible].

LATEST PRICES OF IRISH STOCKS.—3 per Cent. Consols, 90⅛—3½ Stock, 97⅞—Ditto, New, 100⅛ ⅞—3½ per Cent. Debentures, 90⅛—Bank Stock, 170—Kingstown Railway, 83—Dargboth, 10—National Insurance Company, 20—City of Dublin Steam Company, 111½—Ditto Stock, 1838, 51¾—British and Irish Steam Company, 11½—Hibernian Bank, 37⅛—Royal Bank, 30—Mining Company of Ireland, 14¾—Wicklow Copper Mines, 14.

LEEDS, Tuesday.—On Saturday last symptoms of improvement were already manifested in shares, arising chiefly from the satisfaction felt from the measures [illegible]

[illegible]

NEWCASTLE, Thursday.—Our share market has been more firm this week, and an advance has taken place in some of our local stocks. Newcastle and Carlisle, and Brandling Junction Railway shares are sought after. The proposed duty of Sir Robert Peel's, on all coals exported to foreign countries, has given great dissatisfaction here.—North of England Joint-Stock Bank, 4½l.; Northumberland and Durham District Bank, 8l.; Newcastle, Shields, and Sunderland Union Bank, 7½l.; Newcastle-upon-Tyne Joint-Stock, 3½l.; Newcastle Commercial, 5l.; Sunderland Joint-Stock, 6½l.; Darlington District, 4l.; Carlisle City and District, 30l.; Carlisle and Cumberland, 6½l.; Stockton and Durham County, 4½.—Newcastle and Carlisle Railway, 92l.; Newcastle and North Shields, 43l.; Brandling Junction, 45l.; Durham and Sunderland, 30l.; Clarence, 20l.; Hartlepool and Stockton, 35l.; Hartlepool Dock and Railway, 16½l.; Great North of England, 85l.—Newcastle Union Shipping Company, 4l.; Port of Newcastle, 15l.; London, Newcastle, and South Shields, 5l.; Gateshead and Tyne, 16l.—North and South Shields Steam Ferry, 110l.—Newcastle Subscription Water Company, 20l.—Newcastle and Gateshead Union Gas Company, 7½l.—Durham County Coal Company, 10l.

HULL, Thursday.—The share market is firm and buoyant, and all our advices concur in predicting a speedy advance.—Birmingham and Derby Railway, 55l.; Birmingham and Gloucester, 54l. to 56l.; Grand Junction, 173l.; Great North of England, 87l.; Great Western, 88l. to 89l.; Hull and Selby, 39l.; Leeds and Selby, 36l.; Liverpool and Manchester, 167l. to 168l.; London and Birmingham, 174l. to 174½l.; London and Brighton, 35½l. to 35¾l.; London and South-Western, 58l. to 60l.; Manchester and Birmingham, 79½l. to 79l.; Manchester and Leeds, 78l. to 79l.; Midland Counties, 79½l. to 80l.; North Midland, 69l. to 70l.; South Eastern and Dover, 26l.; York and North Midland, 92l. to 93½l.; Edinburgh and Glasgow, 44½l.; Northern and Eastern, 39l. to 41l.—York City and County Bank, 36l.; Yorkshire District, 9l.; Hull, 7l.; Yorkshire Agricultural, 7½l.; Sunderland Joint-Stock, 6½l. to 6½l.—Hull Dock Company, 125l.—Hull Gas Works, 25l.—Hull Flax and Cotton Mills, 16l.—Hull Marine Insurance Company, 11½l.

BRISTOL, Friday.—Railway stock has advanced considerably since my last, though we have had but little business doing here; prices, however, are firm at my quotations.—Great Western Railway, 91l. to 92l.; halves, 63½l. to 64½l.; fifths, 10l. to 10½l.; Bristol and Exeter, 38l. to 40l.; Bristol and Gloucester, 1l. to 2l.; Birmingham and Gloucester, 56l. to 58l.; Birmingham and Derby, 54l. to 56l.; Cheltenham Union, 17½l. to 19½l.; London and Brighton, 35½l. to 34½l.; Taff Vale, 6 l. to 65l.—Bristol Gas Company, 32l.; Clifton, 23l. to 25l.

GLASGOW, Wednesday.—Ballochney Railway, 87½l.; Dundee and Arbroath, 23½l.; Edinburgh and Glasgow, 42l.; Garnkirk and Glasgow, 42l.; Glasgow and Greenock, 22½l.; Glasgow, Paisley, Kilmarnock, and Ayr, 36l.; Monkland and Kirkintilloch, 36l.; Slamannan, 25l.; Wishaw and Coltness, 40l.

EDINBURGH, Wednesday.—Edinburgh and Glasgow Railway, 41l.; Dalkeith and Edinburgh, 30l.; Glasgow and Greenock, 22½l.; Glasgow and Garnkirk, 42l.; Glasgow and Ayrshire, 37l.; Wishaw and Coltness, 40l.; Dundee and Arbroath, 23l.; Arbroath and Forfar, 23l.

MANCHESTER, Thursday.—Manchester and Birmingham Railway, 28½l.; Manchester, Bolton, and Bury, 52¾l.; Manchester and Leeds, 78½l.—Bank of Manchester, 3½l.; Stockport, 2½l.; Manchester and Liverpool District, 10½l.; Manchester and Salford, 10½l.; South Lancashire, 5½l.; Union of Manchester, 6½l.—Manchester Fire and Life Assurance Company, 9½l.—Union Plate Glass Company, 6l.

SALE OF COPPER ORES IN CORNWALL.

Sampled March 3, and sold at Pearce's Hotel, Truro, March 17.

Mines.	Tons.	Price.	Purchasers.	Mines.	Tons.	Price.	Purchasers.
Treasvean	128	£6 1 0	Williams.	Wh. Jewel	73	£5 14 0	Williams.
ditto	87	7 15 6	—	ditto	48	6 9 6	—
ditto	96	5 18 0	—	Fowey C.	112	6 7 6	Vivians.
ditto	93	7 15 6	Vivians.	ditto	85	5 15 6	—
ditto	41½	5 2 0	—	ditto	75	4 6 6	—
ditto	41½	5 2 0	P. Grenfells.	Holmbush	109	9 0 6	P. Grenfells.
ditto	38½	3 18 6	Mines Royal	ditto	98	6 10 6	—
ditto	38½	3 18 6	English Co.	Harmony	50	5 10 6	English Co.
ditto	73	2 16 0	Nevill & Co.	ditto	29	3 8 6	—
ditto	71	4 6 6	English Co.	ditto	29	3 8 6	Williams.
ditto	69	6 11 6	—	ditto	15	3 8 0	Mines Royal
ditto	65	5 7 6	Vivians.	ditto	13	3 8 0	Vivians.
Poldice	81	5 15 6	Freemans.	Cardrew	28	4 6 6	English Co.
ditto	75	6 16 0	—	ditto	10	1 5 0	Vivians.
ditto	66	7 7 6	Williams.	W. Maiden	30	4 10 6	Nevill & Co.
ditto	79	4 10 6	Freemans.	ditto	30	4 10 6	Williams.
ditto	79	4 10 6	Nevill & Co	Brewer	50	6 6 6	English Co.
ditto	65	6 13 0	Freemans.	Tregollan	24	4 12 0	Crown Co.
ditto	53	6 16 0	—	ditto	28	4 12 0	Williams.
ditto	51	5 15 6	—	Pencreannow	14	1 19 0	Freemans.
Wh. Jewel	107	5 14 6	Williams.	W. Leisure	13	3 15 0	Vivians.
ditto	96	5 5 0	—	W. Damsel	5	5 14 0	Mines Royal
ditto	81	9 10 6	—	ditto	5	5 14 0	English Co.
ditto	29	5 14 0	Nevill & Co.	Truro Con.	3	2 3 0	Williams.

TOTAL PRODUCE.

Mine	Tons	Amount	Mine	Tons	Amount
Treasvean	812	£5162 16 0	Wh. Maiden	60	£271 10 3
Poldice	649	2861 1 0	Brewer	50	305 17 0
Wh. Jewel	377	2285 4 6	Tregollan	56	257 12 0
Fowey Consols	272	1529 5 0	Pencreannow	14	27 6 0
Holmbush	207	1623 3 6	Wh. Leisure	13	48 15 0
Wh. Harmony, Cardrew	158	640 4 0	Wh. Damsel	10	57 0 0
			Truro Consols	3	6 9 0

Average standard, 118l. 8s.—Average produce, 7.—Average price, 5l. 4s. 0d.—Quantity of ore, 2516 tons.—Quantity of fine copper, 176 tons 17 cwt.—Amount of money, 13,137l. 5s. 0d.—Average standard of last sale, 116l. 9s.—Average produce, 7⅞.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	43½	£179 12 3
English Copper Company	357½	1810 8 3
Vivian and Sons	509½	2746 8 0
Freeman and Co.	567	2270 7 6
Grenfell and Sons	249½	1731 16 6
Crown Copper Co.	28	126 16 6
Sims, Williams, Neville, Druce, and Co.	161	636 13 6
Williams, Foster, and Co.	616	4118 2 6
Total	2516	£13,137 5 0

Copper ores for sale on Thursday next, at Pearce's Hotel, Truro.—Mines and Parcels.—Consols Mines, 1000; United Mines, 460; Hallenbeagle, 547; Trethellan, 251; Treasvean, 209; Fowey Consols, 277; Wheal Ellen, 132; Wheal Trewarvas, 151; Wheal Unity Wood and Union, 100; West Wheal Jewel, 93; Great Wheal Charlotte, 77; Tregothnan Consols, 70.—Total, 3326 tons.

Copper ores for sale on Thursday week, at Sepell's Hotel, Pool.—Mines and Parcels.—East Wheal Crofty, &c., 550; Dolcoath, 331; United Hills, 265; South Wheal Basset, 253; East Pool, 253; Fowey Consols, 211; Camborne Vean, &c., 207; Tretoil, 191; Par Consols, 191; Wheal Harriet, 127; Carzise, 50; Wheal Tehidy, 61; Cliff Downs, 12.—Total, 2751 tons.

SALES OF BLACK TIN,

By Ticket, on the 15th and 17th of March, at Penzance and Truro.

Mines.	Tons.	Price.	Amount.	Purchasers.
Charlestown	10½	£60 14 0	£621 6 0	L. C. & W. Daubuz.
ditto	10¾	60 10 0	627 6 6	Bolithos and Co.
ditto	10½	60 10 0	621 6 6	Williams and Co.
ditto	10	57 2 6	569 17 6	Williams and Co.
Bodmick	2¼	60 10 0	136 16 3	L. C. & W. Daubuz
ditto	2¼	60 10 0	136 14 3	Williams and Co.
ditto	3	59 3 0	177 15 6	Bolithos and Co.
ditto	2	58 3 0	117 13 0	Williams and Co.
ditto	13½	60 11 0	831 1 10	Bolithos and Co.
ditto	1	56 2 6	56 2 6	ditto.
Gavrigan	2½	63 6 0	107 10 0	Bolithos and Co.
ditto	2½	63 6 0	107 10 0	Williams and Co.
Polgooth	1½	59 5 0	63 13 6	L. C. & W. Daubuz
ditto	1	56 0 0	56 0 0	ditto.
Wheal Mary	7½	57 10 0	375 0 0	ditto.
ditto	7½	57 10 0	375 0 0	Bolithos and Co.
ditto	7½	57 10 0	375 0 0	Williams and Co.
ditto	1½	56 0 0	63 0 0	L. C. & W. Daubuz
ditto	1½	56 0 0	63 0 0	Bolithos and Co.

Total tons, 118¾.—Amount, £6877 19 1.

SALE OF COPPER ORES AT SWANSEA.

Copper ores for sale March 22.—Chili 60, ditto 58, ditto 56, ditto 55, ditto 48, ditto 40, ditto 37, ditto 34, ditto 13, ditto 6, ditto 3, ditto 103, ditto 73, ditto 70—Knockmahon 170, ditto 103, ditto 80, ditto 81, ditto 73, ditto 16—Berehaven 89, ditto 75, ditto 75, ditto 70, ditto 70, ditto 58, ditto 78—Cobre 80, ditto 78, ditto 70, ditto 40, ditto 100, ditto 90, ditto 7—Allihies 111, ditto 100, ditto 97, ditto 60—Cushore 120—Lackamore 30—Llwynrin 18, ditto 12—Phoenix 47—Glamorganshire 11—Chili 4.—Total, 1962 tons.

COAL MARKET LONDON.

MONDAY.—Price of coals per ton at the close of the market.—Adair's Main 17 [illegible]

[illegible]

WEDNESDAY.—[illegible]

[illegible]

FRIDAY.—[illegible]

[illegible]

LATEST CURRENT PRICES OF METALS.

LONDON, MARCH 18, 1842.

	£ s. d.		£ s. d.
IRON, Eng.—Bar ton 0 0 0 to	6 15 0	COPPER—Foreign…. (dy. 37s.)	—
Do. Carg. in Wales	5 15 0	TIN, Brit.—Blocks……cwt	3 12 0
Hoops……ton	9 0 0	Bars……do.	3 14 0
Sheets……ton	10 0 0	Banca….0 0 0 to	3 12 0
Pig. No. 1……ton	4 15 0	Straits….0 0 0 to	3 6 0
Do. in Wales….	4 0 0	Tin Plates—I.C. (box)..1 10 0 to	1 12 0
Foreign—Swedes, cn. bd. ton	12 10 0	I.X. do. ..1 16 0 to	1 18 0
Russian com….ton	14 0 0	(Others in proportion.)	
Duty 30s. per ton. P.S.I.….ton	15 0 0	LEAD, Brit.—Pig……ton	19 10 0
C.C.N.D. ton	16 0 0	Sheet……ton	20 5 0
STEEL, Eng. Blistered, 25 0 0 to	45 0 0	Shot……ton	21 10 0
Shear do. do. 45 0 0 ..	54 0 0	Red……ton	20 10 0
Cast do. do. 45 0 0 ..	54 0 0	White (dry)…ton	24 0 0
Foreign—Duty 20 per cent. Swedes in kgs bd ton	18 10 0	Do. (gd. in oil) ton	22l. a 28l.
Do. Faggots bd. ton	19 10 0	Foreign—Span. (dy. 40s.) .	19 0 0
Milan….. bd. ton	0 0 0	SPELTER……0 0 0 to	27 0 0
COPPER, Brit.—Cake……ton	96 0 0	For delivery 0 0 0 to	26 10 0
Tile……do.	94 0 0	English Sheet……	43 0 0
Sheets…. lb.	0 0 11½	QUICKSILVER—(dy. 1d. per lb.)	0 4 0

REMARKS.—There is no alteration to report on business doing in the metal market.

EXPORTATION OF BRITISH AND FOREIGN METALS from the ports of London and Liverpool, for the month ending February 28, 1842:—

	British.	Foreign.	Total.
Iron……tons	8,420	847	9,267
Steel	239	272	511
Copper	1	507	508
Do. sheets	356	—	356
Tin	159	207	366
Do. plates..boxes	18,773	—	18,773
Lead……tons	287	343	630
Spelter	—	289	289
Quicksilver……lbs.	—	82,213	82,213

EXPORTATION OF GOLD AND SILVER.—By the official return published by the Customs, the export of the precious metals from the port of London to foreign and colonial ports, for the week ending Thursday last, was as under:—

Silver coin to Rotterdam	70,000	ounces.
" Hamburgh	20,000	"
Silver bars to Rotterdam	114,000	"
" Hamburgh	18,000	"

The quantity of silver coin and bullion shipped at Dover in the month of February amounted to 708,250 oz.; and of gold coin, 550 oz.

CURRENT PRICE OF GOLD AND SILVER.

Foreign Gold in Bars.. per oz.	£3 17 9	New Dollars…… per oz.	£0 4 9¾
" " Portugal pieces	3 17 5	Silver in Bars (standard)	0 4 11¾

PRICES OF MINING SHARES.

Shares.	BRITISH MINES.	Paid.	Price	Shares.	BRITISH MINES.	Paid.	Price
500	Anglesey	5	—	6,000	Tin Croft	6¼	3¼
4,000	Bissoe Bridge	5	7½	4,300	Tretoil	1½	2½
20,000	British Iron	70	5 dis	1,000	Trevidgia	5	—
8,000	Blaenavon	45	20	170	Treviskey and Barrier	—	160
120	Brewer	—	100	96	Treasvean	—	1550
179	Bodnick	—	99	120	Trethellan	—	230
1,000	Carn Brea	—	110	4,000	United Hills	5	4¼
2,000	Cornubian Lead Co.	2	4¼	6,000	Wicklow Copper	5	13
6,000	Cornwall Great United	10½	1	3,845	West Wheal Jewel	10	5½
	Cuddra	10	—	1,000	Wheal Julia	—	6¼ ⅝
512	Cook's Kitchen	—	50	128	Wheal Kitty	—	60
112	Charlestown	—	375		**FOREIGN MINES.**		
5,000	Dartmoor Consols	5	1½	5,000	Alten Mining Company	13½	8
10,000	DurhamCountyCoalCo.	37	9	10,000	Anglo Mexican Co.	100	1¼
2,000	Danescombe	—	2	3,374	Do. Subscription	25	1
6,000	De Dunstanville	—	—	2,000	Bolanos	150	4
1,000	Duffield	20	—		Ditto Scrip	15	4
200	Diamond	3½	10	10,000	Brazilian Imperial	21	10
1,200	East Mulberry Hills	3½	1	10,000	Bolivar	20	1
128	East Pool	—	370	10,000	Ditto Scrip	10	2
4,000	East Tretoil	1	4	10,000	Cata Branca } Brazilian	6¼	7½
3,200	Great Wh. Prosper	7½	6¼	10,000	Conceicao } Co.	4	—
14,000	Great Wh. Charlotte	3	1¼	12,000	Cobre CopperCompany	40	33¼
10,000	Hibernian	12½	7½	8,300	Colombian Co. regis.	55	7
1,000	Holmbush	14	50	10,000	Copiapo Mining Co.	13½	9
2,000	Isle of Sark (Guernsey)	11	15	20,000	General Mining Assn.	20	2
20,000	Mining Co. of Ireland	7	14¼	5,351	Mexican Company	38½	2
6,000	Polbreen	4	1	12,000	Mocuolas and Cocaes	25	4¼
3,000	Polberou Consols	10	½	14,342	{ Real del Monte, regis.	62½	7½
2,000	Relistian	—	½		{ Do. unregistered	—	3¼ ⅛
5,000	Redmoor Consolidated	5	1¼		Ditto Loan Notes	130	16
10,000	Rhymney Iron	50	16	7,000	Royal Santiago	10	20
100	Rosewall Hill	100	100	11,000	St. John d'el Rey	14½	7
800	South Towan	10	1	40,000	United Mexican	40	1¼
4,000	Tregollan	4½	1		Black Scrip, addl. capital	5	1¼
4,000	Treleigh Consols	4½	3½		Red New Scrip	5	3¼
4,303	TamarConsols	3	2				

RAILWAY SHARE LIST AND TRAFFIC RETURNS.

Line.	Entire Lgth.	Now Open.	Present actual cost.	Pd. on Share.	Val. of Share	Last week's Returns.
Arbroath and Forfar Railway	15	15	£ 131,445	25	22	146 0 6
Birmingham & Derby Junc.	48	38½	853,044	100	56 5	1095 5 10
Birmingham and Gloucester	51½	51	1,013,723	100	57	1442 8 2
Brandling Junction	25	25	457,694	45	—	768 15 7
Chester and Birkenhead	14½	14½	456,004	50	30	382 4 10
Dublin and Kingstown	6	6	531,200	100	77½	—
Dundee and Arbroath	16½	16½	134,804	25	23	190 6 3½
Eastern Counties*	126¼	17½	1,476,170	23	10½ ½	749 10 7
Edinburgh and Glasgow	46	46	1,255,734	50	43	1153 1 7
Glasgow and Ayr	51	40	676,542	43	40	901 6 11
Glasgow and Paisley Joint	22½	22½	250,000	25	25	491 9 6
Gd. Junc. & Chester & Crewe	113½	113½	2,192,047	100	192	7722 0 11
Great North of England	75	45	1,000,000	100	86½	1296 12 2
Great Western	118	118	5,000,044	65	90 1½	10165 1 10
Hull and Selby	31	31	600,000	50	38½	841 9 1
Lancaster & Preston Junc.	20½	20½	350,000	42¼	37½	413 4 7
Liverpool and Manchester	31	31	1,410,000	100	167	3264 13 8
London and Birmingham	112½	112½	5,724,807	90	173 4½	18036 13 8
London and Blackwall	3½	3½	867,000	33	11½	614 11 5
London and Brighton	46	45½	2,000,530	50	36 ⅜	2119 9 5
London and Croydon	10¼	10¼	557,701	13½	12½ 13	367 15 4¼
London and Greenwich	3¾	3¾	700,000	20	6¼	649 1 9
London and South Western	93	77	2,260,607	50½	59 ½	4329 0 9½
Manchester, Bolton, & Bury	10	10	775,296	80	53	585 19 1½
Manchester & Birmingham	45	5	1,168,612	40	27½	321 16 10
Manchester and Leeds	50	10	3,525,100	70	80	4189 4 7
Midland Counties	57	57	1,410,700	100	80 79½	2219 3 10
Newcastle and Carlisle	60½	60½	750,000	100	90	1263 10 10
Newcastle and N. Shields	7	7	252,677	50	42	341 16 3
Northern and Eastern†	32½	15½	550,218	40	38½	464 0 0
North Midland	72½	72½	2,939,697	100	71½ 70	3047 3 9½
North Union‡	23	23	950,000	75	73½	900 13 7
Preston and Wyre	19½	19½	274,000	50	30	136 16 8
Sheffield and Manchester	40	7	251,937	32½	—	217 12 11
Ulster	25	8	720,741	22½	—	388 16 9
York and North Midland	25	25	447,180	50	93¼ 4	1639 9 7

* Including Northern and Eastern Railway toll. † Rent and toll to Eastern Counties (about 120l. per week) included in the returns. ‡ The Liverpool and Manchester toll is deducted.

METEOROLOGICAL JOURNAL, 1842.

	March	Thermometer	Barometer		March	Thermometer	Barometer
Thursd.	10	from 34 to 45	29,29 to 29,32	Monday	14	from 35 to 47	30,12 to 30,20
Friday	11	29 .. 52	29,81 .. 29,73	Tuesday	15	42 .. 52	30,24 .. 30,25
Saturd.	12	29 .. 50	29,94 .. 29,91	Wednes.	16	43 .. 55	30,29 .. 30,12
Sunday	13	37 .. 49	30,02 .. 30,06				

Wind W. and S.W.

On the 10th, generally clear, and wind very boisterous during the morning; the 11th, a general overcast, and rain in the morning; the 12th, and following day, generally clear; the 14th, overcast, and rain in the morning; the 15th, overcast; the 16th, cloudy, and a little rain in the evening.

Rain fallen ,45 of an inch.

Edmonton. CHARLES HENRY ADAMS.

THE LONDON GAZETTE—BANKRUPTS.

MONDAY.—C. Page, High-street and Nottingham-mews, Marylebone, coach harness maker.—T. Morris, Newbridge, Glamorganshire, grocer.—J. Jones, Liverpool, cordwainer.—J. [illegible], Bedford, Burton-upon-Trent, Staffordshire, common brewer.—J. Parbery, Northampton, saddler.—F. Broad, Halifax, Yorkshire, cotton spinner.—S. [illegible], Ramsgate, Kent, builder.—J. Alexander, Pendleton, Lancashire, [illegible].—W. Lloyd, Liverpool, wine merchant.—J. Page, [illegible], Gloucester, [illegible].—J. and T. Frankland, Liverpool, merchants.—T. F. Craven, Canterbury, builder.

FRIDAY.—W. M'Leod, Coleman-street buildings, merchant.—W. B. Bray, Old Windsor, engineer.—D. Bolsover, Broad-street, Cheapside, warehouseman.—G. Ellis, Harwood, Lancashire, iron founder.—W. B. Paynton, Bath, surgeon.—J. Matthews, Ledbury, Herefordshire, [illegible].—W. Barron, Shincliffe, Durham, firebrick manufacturer.—F. A. Wheeler, Birmingham, percussion cap manufacturer.—J. Watson, Manchester, muslin manufacturer.—J. Powell, Newcastle-under-Lyme, grocer.—T. W. Wright and G. W. Hyde, Nottingham, drovers.—T. Cloud, Worcester, victualler.—J. Anderson, and W. Garrow, Liverpool, merchants.

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